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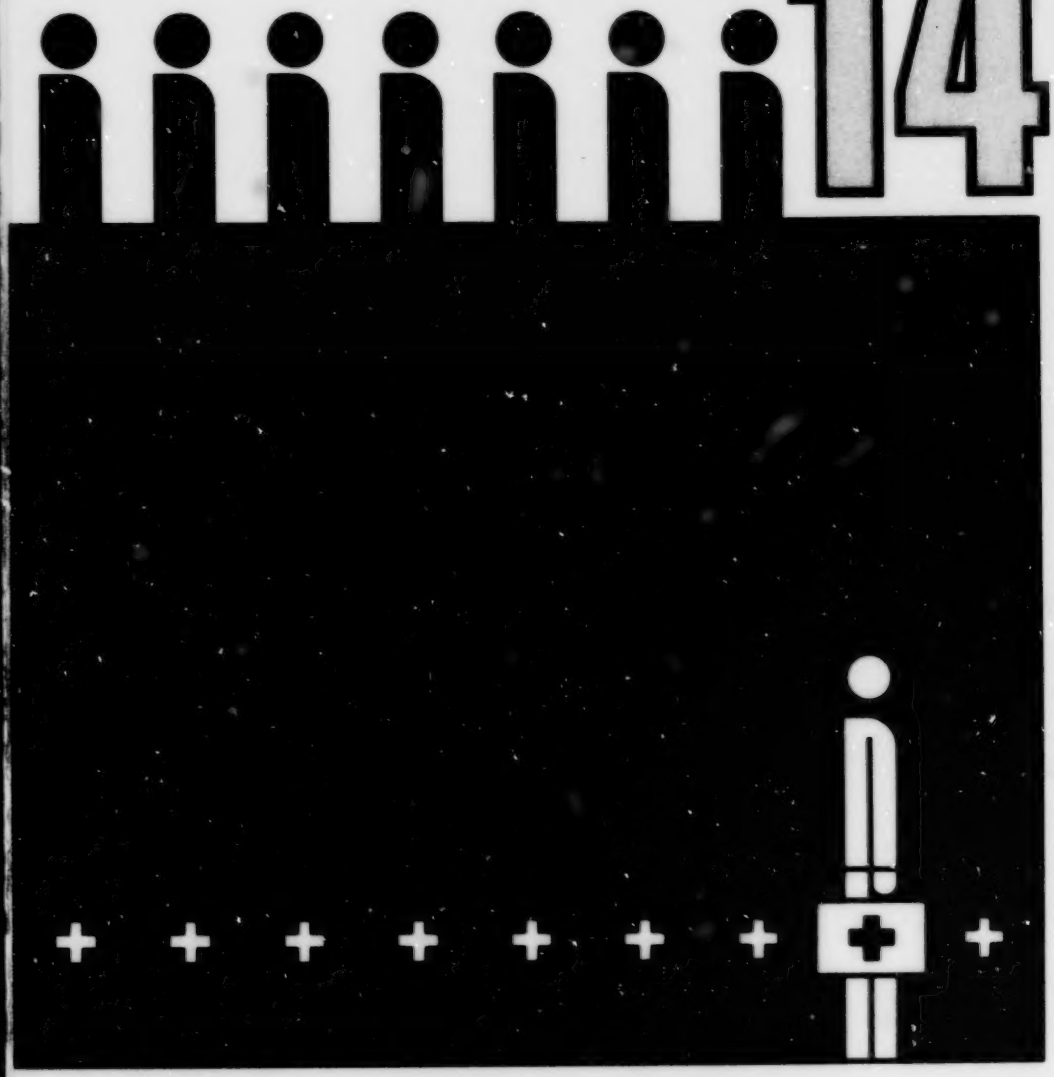
SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

Editor: ROSANNA M. BECHTEL

VOLUME 14



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An annotated bibliography with special emphasis on developing countries

Volume 14

Editor: Rosanna M. Bechtel

Abstracts written by: Rosanna M. Bechtel, Elisabeth Bollinger, Hope Cadieux-Ledoux, Anita Firth, and David Paul-Elias

(This is the fourteenth in a series of annotated bibliographies on low-cost rural health care and health manpower training. These volumes are published irregularly.)

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Preface

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Many thanks as always to the abstractors and to Lois Fitzpatrick and Denis Sing for their help in the preparation of this volume.

Rosanna M. Bechtel
SALUS Manager
Information Sciences

Abbreviations and Acronyms

AID — Agency for International Development
BCG — Bacillus Calmette-Guerin
cm — centimetre(s)
DDT — dichlorodiphenyltrichloroethane
DPT (DTP) — diphtheria-pertussis-tetanus
Engl — English
FAO — Food and Agriculture Organization
Fren — French
g — gram(s)
Hb — haemoglobin
Hg — mercury
IPPF — International Planned Parenthood Federation
IU — international unit
IUD — intrauterine device
kg — kilogram(s)
mg — milligram(s)
ml — millilitre(s)
mm — millimetre(s)
PAHO — Pan American Health Organization
Span — Spanish
UK — United Kingdom
UNICEF — United Nations Children's Fund
US (USA) — United States of America
USSR — Union of Soviet Socialist Republics
WHO — World Health Organization

I Reference Works

See also: 9407.

9101 **Australian Development Assistance Bureau, Canberra, Australia.** ***Bibliography of holdings relating to primary health care, in the Resource Centre, as of 24 February, 1981.*** Canberra, Australia, Australian Development Assistance Bureau, 1981. 6p. Engl.

This list of 47 documents on primary health care in the Resource Centre of the Australian Development Assistance Bureau contains author, title, source, date, and series information but no abstracts. Entries are arranged alphabetically by author. (DP-E)

9102 **Courrier, Paris.** ***Aliments riches en protéines: nouvelles sources/Protein-rich food: new sources.*** Courrier (Paris), 31(2), 1981, 141-143. Engl., Fren.

This paper contains 87 references to articles published in journals from various countries on non-conventional protein-rich foods, particularly of vegetable origin, to be used by both normal and malnourished children. Abstracts are not included. (HC-L)

9103 **US AID, Washington, D.C.** ***A.I.D. research and development abstracts.*** Washington, D.C., US AID. Engl.

This quarterly journal is intended for US AID staff throughout the world and interested institutions in developing countries. It presents abstracts of AID-funded current and less recent research studies, state-of-the-art reports, sector analyses, special evaluations, and other documents that, taken together, describe a broad spectrum of international development experience. Of particular interest for our purposes are the sections on health, nutrition, and population. Instructions and forms for ordering documents are included in each issue. (HC-L)

II Organization and Planning

II.1 Health Workers

See also: 9124, 9413, 9425, 9454.

9104 **Alakija, W.** *Prevention of childhood mortality in Nigeria by use of medical auxiliaries.* Tropical Doctor (London), 11(3), Jul 1981, 118-120. Engl.

Analysis of data from Nigeria's Ministry of Health indicates that child health auxiliaries need more training in the prevention and treatment of protein-calorie malnutrition, pneumonia, measles, malaria, tetanus, gastroenteritis, and anaemia, all of which are major causes of mortality among children in Bendel State. Tables present data on age and sex distribution, hospital beds, death rates, and causes of death. (DP-E)

9105 **Bennett, M.J.** *Training for primary health care.* Kensington, Australia, University of New South Wales, Centre for Medical Education, Research and Development, No. 1, 1981. 61p. Engl. Refs.

Written by participants in an elective course in primary health care (PHC) conducted by the Centre for Medical Education, Research and Development at Australia's University of New South Wales, the contributions to this review paper represent attempts to examine the implications of the PHC approach to individual responsibilities within a variety of health care settings. Included are the following: a review of the PHC concept and its determinants; an analysis of some of the issues involved in the training of health auxiliaries in Tanzania; a description of an expanded role for community health nurses in Thailand; a suggestion on the contribution an integrated curriculum may make to increasing the community orientation of medical education in Australia; a description of a medical undergraduate programme emphasizing PHC in the USA; and a review of postgraduate training for primary care physicians in a number of developed countries. (EB)

9106 **Bennett, M.J., Ewan, C.E.** *Educational processes for trainers of primary care workers.* Kensington, Australia, University of New South Wales, Centre for Medical Education, Research and Development, 1981. 34p. Engl.

Intercountry Workshop on Educational Processes for Trainers of Primary Health Care Workers, Kensington, Australia, 1-13 Feb 1981.

Attended by 17 participants from 13 countries, this intercountry workshop dealt with the priority assigned to primary health care (PHC) by WHO in its implementation of programmes in the Western Pacific Region. The objectives were to exchange ideas, to identify factors involved and training needs for effective implementation of PHC, to identify appropriate training approaches, and to develop an outline of such training programmes. The proceedings include a description of the systematic planning of training programmes, project work, and an evaluation of the workshop. A list of participants and background information concerning PHC programmes in Western Pacific countries are contained in the annex. (EB)

9107 **Blizard, P.J.** *Some basic issues in the construction of medical school curricula.* Jakarta, Ministry of Education and Culture, 1975. 9p. Engl.

This bulletin aims to assist planners of medical school curricula in Indonesia to determine what subjects should be included. Four different approaches to the problems of constructing curricula are tabulated. One possible way of seeking to choose between these four options is then put forward, followed by a description of the method of one particular medical school in its choice. (EB)

9108 **Colbourne, M.J.** *Primary health care.* Tropical Doctor (London), 12(3), Jul 1982, 97-98. Engl.

A disproportionate part of the medical budgets of developing countries is spent on high technology medicine and physicians are often trained, at least partly, in Europe or North America. Thus little attention is given to communicable diseases and those attributable to nutritional deficiency, the main causes of morbidity and mortality. Much of the effort to counteract this revolves around the training of auxiliary health workers and the emphasis on primary health care. Unfortunately, this has often resulted in physicians being unfairly cast as villains. Physicians have the same goal as other health workers and an important role to play in the delivery of health care to all. (DP-E)

9109 **Deva, M.P.** *Training of psychiatrists for developing countries.* Australian and New Zealand Journal of Psychiatry (Melbourne, Australia), 15(4), Dec 1981, 343-347. Engl. 9 refs.

In developing countries, due to acute shortages of mental health manpower and deficiencies in available psychiatric services, there is a need for psychiatrists' training programmes that produce well-rounded generalists able to cope with most psychiatric problems on their own. Consequently, the trainee should have a good grounding

in the briefer psychotherapies and in behaviour modification. There is a need to pool resources in developing countries to initiate local training programmes. Cooperation between developed and developing countries can also play a useful role in the starting of regional training programmes to benefit several countries. (Modified journal abstract)

9110 **Goddard, J.M.** *Team concept in community health care.* Curationis (Pretoria, South Africa), 4(3), Dec 1981, 37-39. Engl.

In this essay the author defines the important components of the team concept in the health field and discusses several elements that must be present, e.g. clearly defined reasons for working together, a firm belief in team effectiveness, members' recognition of other's expertise and their own limitations, inclusion of non-professionals in the health team, and development of effective channels of communication. A case study is used to illustrate what often happens when the principles of teamwork are not followed. The essential role of the community nurse in the health team network is also discussed. (EB)

9111 **International Children's Centre, Paris.** *Breastfeeding; document intended for health personnel and educators.* Paris, International Children's Centre, Sep 1979. 7p. Engl.

Health personnel play an important part in a woman's decision whether or not to breast-feed. In particular, they must now substitute for the friends and relatives who used to support lactating mothers in traditional societies. Recommendations are presented for training health workers in this new role, with emphasis on the programme's educational objectives, content, attitudes, and methods. (DP-E)

9112 **Navia, J.M.** *Sparkman Center: a pragmatic concept in public health training in developing countries.* Alabama Journal of Medical Sciences (Birmingham), 20(2), Apr 1983, 152-153. Engl. 9 refs.

The role of the John J. Sparkman Center for International Public Health Training, which supports cooperative programmes at developing country institutions, is described and assessed. Public health training should now emphasize the primary care approach based on community participation and appropriate technology. Some of the health problems common to developing countries are also outlined. (DP-E)

9113 **Reisman, A., Duran, L.** *Designing primary health care teams for developing countries.* Public Health Reports (Rockville, Md.), 98(2), Mar-Apr 1983, 184-189. Engl. 15 refs.

An industrial engineering technique, job evaluation, was used in the design of new teams for delivering primary health care in Latin America. The technique was used both in writing job descriptions for new allied health personnel and in designing the curricula needed to train the personnel. In the specific area of malnutrition, tables are used to illustrate techniques for: assigning functions; rating personnel in terms of required skills, level of responsibility, effort, and job conditions; and task analysis. (DP-E)

9114 **Sayman, N.** *Community health nurse in school health services.* Curationis (Pretoria, South Africa), 4(3), Dec 1981, 39-40. Engl.

South Africa's school health services for non-whites emphasize health education and promotion and the detection and referral of children with both health and behaviour problems. The function of the school nurse within these services is described. Although they are not allowed to treat the conditions discovered, the nurses have greatly expanded their role in the areas of diagnosis and physical examination because there are no doctors employed by the schools. (DP-E)

II.2 Organization and Administration

See also: 9218, 9219, 9366.

9115 **Ajao, S.A., Oyemade, G.A.** *Team fights the scourge of poliomyelitis.* Prosthetics and Orthotics International (Glasgow, UK), 5(2), Aug 1981, 68-74. Engl. Refs.

Poliomyelitis is still a medical problem in Nigeria, leaving many patients with muscular paralysis, contractures, and abnormalities that require elaborate treatment. This study examines the treatment outcome of 1 120 patients affected with poliomyelitis and treated at the polio clinic of the University College Hospital, Ibadan. An attempt was made (through the multidisciplinary approach of a professional health team) to integrate the polio victims back into the community so that they do not constitute an economic liability. An illustrative case (successfully treated) is described. The importance of prophylactic immunization to prevent the wide spread of the disease is also stressed. (Modified journal abstract)

9116 **Arthur, M.I., Goddard, J.M.** *Primary health care.* Curationis (Pretoria, South Africa), 4(3), Dec 1981, 3-5. Engl., Afrikaans.

At the 1978 Alma-Ata Conference on Primary Health Care (PHC), the World Health Organization expressed the urgent need for action by all governments and health and development workers to protect and promote the health of all people of the world. PHC is based on practical, scientifically sound, and socially accepted methods and technology and encompasses promotive, preventive, curative, and rehabilitative services. It is seen as a system that includes promotion of proper nutrition; development of adequate housing, safe water, and basic sanitation; maternal and child care; disease prevention and control; health education; and appropriate medical treatment. The authors express the need to examine certain fundamental concepts, including the role of the community, inclusion of PHC at all levels of national development plans, even distribution of health care, and the use of national resources in supporting PHC. (EB)

9117 **Biener, K.** *Gesundheitsprobleme auf Mauritius. (Health problems in Mauritius).* Öffentliche Gesundheitswesen (Stuttgart, Germany FR), 43(4), 1981, 189-190. German.

In this sketch of the health situation in Mauritius the author looks at social medicine, family planning, and malnutrition. Of the island's 950 000 inhabitants, 63% are of Indian origin and 11% Chinese; whites, Africans, and Creoles make up the remaining 26%. Students attend 6 years primary and 5 years secondary school. There is one university (offering courses in biology, chemistry, mathematics, economics, and agriculture) and a research centre for the sugar industry. Malnutrition remains the primary cause of death, while the number of deaths by traffic accidents is relatively high. Malaria and typhoid fever are under control; alcoholism is a serious problem. Realizing the need for social services, female voluntary workers are offering valuable assistance in various fields, mainly health education, family counselling, and self-help programmes. (EB)

9118 **Burrus, O.** *Santé et développement dans les pays du Tiers-Monde. (Health and development in Third World countries).* Revue de l'Infirmière (Paris), (10), May 1981, 12-14. Fren.

Medicus Mundi is the French branch of the International Organization for Health Cooperation, a non-profit organization aimed at promoting health in the Third World through technical assistance and the training of health personnel. Technical assistance includes the design and evaluation of health animation programmes and the provision of medical personnel (physicians). The training element consists of publishing a periodical called Health and Development aimed at the continuous education of nurses in the Third World and the organization of a series of university courses with the object of studying the medical and non-medical aspects of health in the context of overall development. This paper discusses the philosophy of Medicus Mundi and lists the names and addresses of other organizations with similar or allied interests. (HC-L)

9119 **Canadian International Development Agency, Ottawa. Aga Khan Foundation, Geneva.** *Role of hospitals in primary health care.* Geneva, WHO, 1982. 66p. Engl.

Conference on the Role of Hospitals in Primary Health Care, Karachi, Pakistan, 22-26 Nov 1981.

This conference report contains a list of participants, introductory materials, and a summary of the 10 major conclusions in addition to the texts of the four major papers. Topics covered include the role of hospitals in providing support to primary care, in training and reorienting physicians and other professionals towards primary health care, in promoting and using community participation in the development of primary health care, and in conducting and supporting health services research. (DP-E)

9120 **Cardenal, F.** *Recent features of the WHO programme for disability prevention in the African region.* International Rehabilitation Medicine (Guayna, Puerto Rico), 3(4), 1981, 210-213. Engl.

In recent years, WHO has been especially active in establishing programmes for the investigation and treatment of motor disabilities in the African region. These activities have included a number of research projects: the establishment of a collaborating centre for training and research in orthopedics and rehabilitation at the National Orthopedic Hospital in Lagos, Nigeria; the sponsoring of training courses and conferences; the preparation of a manual entitled "Training the Disabled in the Community"; and the drafting of a number of recommendations, the latter included in this article. (DP-E)

9121 **Danielson, R.** *Medicine in the community: the ideology and substance of community medicine in socialist Cuba.* Social Science and Medicine (Aberdeen, UK), 15C(4), Dec 1981, 239-247. Engl. 13 refs.

'Medicine in the community' is the name given in Cuba to the dominant model for health services organization at the area and sector levels in the regionalized structure of Cuban health promotion. The recent historical evolution of the model is here analyzed in terms of ideological and structural factors. The strength of the model appears to stem from its formation into a system that parallels other social trends, particularly the increasing vitality of local governments. The general elements of the community medicine model are described and some implications are discussed. (Modified journal abstract)

9122 **Egypt, Ministry of Health.** *Egyptian experience in primary health care.* Cairo, Ministry of Health, n.d. 45p. Engl.

Egypt's ministry of health envisions primary care as a dynamic system using simple procedures and community health workers to provide the 1st level of contact between the health services and the population but capable of evolving into a basic health delivery service staffed by professionals and providing a full range of services. Community participation is also an important component. Separate sections of this report cover primary health care in rural and in urban areas, emergency medical services, and training. Copious data are presented on the distribution and utilization of health workers and services. (DP-E)

9123 **Ferguson, A.E.** *Commercial pharmaceutical medicine and medicalization: a case study from El Salvador.* Culture, Medicine and Psychiatry (Dordrecht, Netherlands), 5(2), 1981, 105-134. Engl. Refs.

The impact of prepackaged pharmaceuticals on the health care sector of developing country economics, with examples from Asunción, El Salvador, is examined. In the developing countries, prescription drugs, rather than being controlled by physicians, have been integrated into the healing strategies of alternative medical practitioners, giving rise to a specialized commercial pharmaceutical sector. The role of this sector, its operations and personnel, its social and cultural impact, and its possible

effects on morbidity and mortality are discussed. Statistical data are included. (DP-E)

9124 **Garrett, E.J., Kumar, A.K., Standard, K.L.** *Approaches to primary health care in the Commonwealth Caribbean.* Educación Médica y Salud (Washington, D.C.), 15(3), 1981, 232-248. Engl.

A brief review of the health problems of the Commonwealth Caribbean and of the primary care activities being implemented to solve them are presented. Special attention is given to programmes that develop new categories of health workers and direct health manpower toward learning a technology appropriate to the conditions in which they work; this approach aims for the provision of quality health care with limited resources. Other programmes concentrate on the training of primary care physicians and allied health personnel. (Modified journal abstract)

9125 **Huard, P., Niaussat, P.** *Médecine française et l'Asie des moussons. (French medicine and monsoon Asia).* Bulletin de l'Académie Nationale de Médecine (Paris), 165(6), 2 Jun 1982, 705-709. Fren.

This paper presents an overview of French medical achievements during the 19th and 20th centuries in India, China, and Indochina by considering their health care systems, medical research, and training. The history of the creation of health posts, hospitals, and university faculties in Asia, the work of famous French doctors, and advances in disease control are traced. The authors conclude that, while there is a current demand for technical material and medications, there is also the need for the reestablishment of competent and permanent French medical personnel in this region of the world. (EB)

9126 **Indo-German Social Service Society, New Delhi.** *Great concern.* New Delhi, Indo-German Social Service Society. Engl.

This quarterly news bulletin is issued by the Indo-German Social Service Society, New Delhi, India, as part of their "misereor" (I feel great concern) campaign against hunger and disease in the world. It reports on special programmes in the areas of family planning and maternal child health. (DP-E)

9127 **Liu, G.-J.** *Hospital pharmacy practice in the People's Republic of China.* American Journal of Hospital Pharmacy (Washington, D.C.), 39(9), Sep 1982, 1487-1490. Engl.

The practice of hospital pharmacy in the People's Republic of China is described. The pharmacy's role in manufacturing and quality control–, dispensing, and enforcing government directives is discussed; pharmacists are also encouraged to carry out research in both traditional and Western medicine. About 6 000 students are enrolled in 4-5 year courses at 2 colleges and 14 faculties of pharmacy, while approximately 2 000 pharmacy students are following 4-year courses at 17 schools of traditional medicine. Some future challenges are considered. (DP-E)

9128 **Lusty, T.** *Child in the Third World.* American Journal of Diseases of Children (Chicago, Ill.), 135(5), May 1981, 462-466. Engl. 9 refs.
Meeting of the American Ambulatory Pediatric Association, San Antonio, Texas, 28 Apr 1980.

The author discusses morbidity and mortality in young children in the Third World, implicating poverty as the main cause of early death. He then examines the role of voluntary agencies in development, countering the criticism that they are small, poorly coordinated, and amateurish with the following arguments: they can respond more quickly to local needs than can bilateral or multilateral organizations; they are more flexible and can take greater risks than can bilateral or multilateral organizations; unlike government aid, their aid is not 'tied'; and they seem particularly effective in harnessing public opinion e.g., in the artificial baby milk scandal involving multinational corporations. A brief history of OXFAM and a description of its work in Kampuchea follows. (HC-L)

9129 **MacGregor, C., Xarchmer, S., López-García, R.** *Medicina perinatal, implicaciones médico-sociales; 2: concepto de regionalización del manejo obstétrico y neonatal. (Medicosocial implications of perinatal medicine; 2: regionalization of obstretric and newborn care).* Gaceta Médica de México (Mexico City), 115(4), Apr 1979, 161-166. Span. 20 refs.
See also entries 9154 and 9327.

This paper discusses the economic and practical advantages of a regionalized system of obstetrics and care of the newborn in Mexico and outlines in point form the activities to be undertaken and the personnel and facilities required by each of the three levels of the hierarchy. (HC-L)

9130 **Markides, A.A.** Cyprus, Ministry of Health. *Annual report of the medical department for the year 1980.* Nicosia, Republic of Cyprus, Ministry of Health, 1980. 44p. Engl.

This comprehensive report of the medical department of Cyprus gives a thorough account of the environmental health and health services of that country in 1980. Described are communicable (tuberculosis, leprosy, thalassaemia, hydatid, and sexually transmitted diseases) and non-communicable diseases, health education and training, primary health care, hospital and health centre services, maternal and child health centres and school health services, and mental health, tuberculosis, and governmental dental services. Nineteen tables help explain the subject matter throughout the text and the appendix contains 21 tables of statistical data. (AF)

9131 **Marquer, L.** *Santé de toute urgence. (Health: an urgent preoccupation).* Actuel Développement (Paris), (37), Jul-Aug 1980, 36-38. Fren.

This paper briefly reviews some of the various health research and training institutions in francophone Africa to which France contributes financial support and teaching staff. (HC-L)

9132 **Mburu, F.M.** *Socio-political imperatives in the history of health development in Kenya.* Social Science and Medicine (Aberdeen, UK), 15A(5), Sep 1981, 521-527. Engl. 18 refs.

The present health systems in most African countries were shaped by colonial domination, the thrust of which was to mold political systems, socioeconomic activities, and cultural patterns that were largely consistent with prevailing European models. This paper examines the beginnings of medical services in colonial Kenya, discussing the role of economic, missionary, and public health interests in their development, and explains how and why the inherited elitist system continues not only to endure but to thrive at the expense of medicine for the masses. (HC-L)

9133 **Minkowski, W.L.** *American physician in rural West Africa.* Western Journal of Medicine (San Francisco, Cal.), 134(3), Mar 1981, 267-272. Engl.

In anecdotal manner, the author describes his 2-year experience as primary care physician in two rural African hospitals, one in the Ivory Coast and the other in Cameroon, containing 15 and 100 beds respectively. Of particular interest are his comments on the range of diseases seen, prescribing habits observed ('more is better'), inpatient care (by relatives), local impressions of government and mission hospitals, and other aspects of health and culture in Africa. (HC-L)

9134 **Nyam-osor, D.** *Mongolia: 60 years of public health.* World Health (Geneva), Dec 1981, 6-9. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguse, Russian, and Spanish.

With the assistance of the USSR, the Mongolian People's Republic has established a system of health services that provides free care to all. These services are organized into three levels: a primary level of general medical and midwifery stations, without physicians, serving 250-300 rural people; a secondary level of 10-15-bed district medical stations serving 2 800-3 500; and a tertiary level composed of hospitals providing specialized care. Diseases that have received particular attention include cancer, skin diseases, tuberculosis, and venereal diseases. There is a separate service for psychiatric care and an additional network of maternal child health centres. Health manpower training is briefly discussed. (DP-E)

9135 **Organización Panamericana de la Salud, Washington, D.C.** *Programa Ampliado de Inmunización. (Expanded Immunization Programme).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 90(6), Jun 1981, 543-549. Span.

This paper reviews the work of WHO's Expanded Programme of Immunization in Latin America and the Caribbean with respect to the following: training of personnel for the administration and implementation of the programme; procuring and financing the requisite amount and kind of vaccines; assisting national laboratories in the production and quality control of vaccines; setting up information systems to provide feedback on the programme; and supporting research, in particular, on the cold chain and the optimal age for vaccination against measles. (HC-L)

9136 **Passmore Sanderson, L.** *Progress of work in the Sudan for abolition of 'female circumcision'.* Tropical Doctor (London), 11(4), Oct 1981, 186. Engl.

A voluntary association in the Sudan, the Babiker Badri Scientific Association for Women's Studies (BBSAWS), has been formed, with the abolition of female circumcision as one of its objectives. In addition to a 3-year project of village welfare work, the BBSAWS is also committed to a national campaign against this practice. The results of three workshops held as part of this campaign are briefly discussed. (DP-E)

9137 **Racoveanu, N.T.** *Towards a basic radiological service.* World Health Forum (Geneva), 2(4), 1981, 521-524. Engl.

A basic health service that is still scarce and poorly organized in the developing world is diagnostic radiology. Existing radiological services are concentrated in large urban hospitals equipped for specialized examinations, but there is little coverage of peripheral areas. To remedy this situation, a basic radiological service has been proposed that would provide basic radiographic examinations at the local level using simple machines and less skilled personnel. The required equipment and training are described in this article. (Modified journal abstract)

9138 **Renger, F.G.** *Entwicklung des Gesundheitswesens in der Mongolischen Volksrepublik. (Development of public health care in the Mongolian People's Republic).* Deutsche Gesundheitswesen Zeitschrift für Klinische Medizin (Berlin, Germany DR), 37(5), 1982, 240. German.

In this overview of health care in the Mongolian People's Republic (population 1.5 million in 1980), the author presents some statistics to show the extent of development from 1960-1978. During this period the number of medical personnel rose from 4 584-11 600, including 3 024 feldshers (up from 955 in 1960), 6 209 nurses (up from 2 905), 799 laboratory technicians (up from 211), 953 pharmacists (up from 403), and 240 X-ray technicians (up from 56); dental workers, non-existent in 1960, numbered 56 in 1978. The number of hospitals increased from 68-118, with 102.6 beds:10 000 persons. There were 375 nurseries with room for 17 600 children, compared to 99 nurseries and 4 700 places in 1960. The number of patients in sanitoria and health resorts rose from 22 400 in 1960 to 86 300 in 1978. The Soviet Union and other socialist countries have contributed greatly to the achievements in the medical fields within Mongolia. (EB)

9139 **Rosenfield, A.G.** *Modern medicine and the delivery of health services: lessons from the developing world.* Man and Medicine (New York), 2(4), 1977, 279-312. Engl. 84 refs.

This paper discusses the US system of medicine and the adverse influence it and its European counterparts have had on the growth of health care in the developing countries. It then examines innovative systems that have been implemented in the USSR, the People's Republic of China, and Cuba, pointing out how self-criticism, motivation, and commitment rather than outside expertise and consultation were crucial to their success. The 1st commentary ("How are the Lessons to be Learned?" by John H. Bryant) examines the dynamics of change as they relate to social institutions and the 2nd ("Lessons from and for Developing Countries" by Mervyn Susser) discusses the issues of health care effectiveness and whether effective health systems reforms can be accomplished without radical change in the economic and political spheres. (HC-L)

9140 **Shen, Y.C., Zhang, W.X.** *Psychiatric service in the People's Republic of China.* Chinese Medical Journal (Beijing), 95(6), Jun 1982, 443-448. Engl. 10 refs.

This paper describes the development of psychiatric services in the People's Republic of China in terms of historical background, including the establishment of the extramural hospital mental health care system, the paramedical and medical personnel training systems, and the recreational, occupational, and home therapy systems. China's psychiatric service is characterized above all by integration of treatment, relapse prevention, and rehabilitation. Some statistical data on the prevalence of mental disorders are included. (Modified journal abstract)

9141 **Sheppard, S.** *Mozambique: progress toward health care for everyone.* Journal of Health Politics, Policy and Law (Durham, N.C.), 6(3), Fall 1981, 520-527. Engl. 27 refs.

After reviewing Mozambique's health problems and health care policy, the author discusses that country's health care system in terms of the central hospital at Maputo, costs, illness and health education, the terminally ill, medical research, national health education and vaccination campaigns, maternal child health centres, and politics. (DP-E)

9142 **Tuberculosis Association of India, New Delhi.** *Scheme for primary health care in tuberculosis.* Indian Journal of Tuberculosis (New Delhi), 28(4), Oct 1981, 218-220. Engl.

This scheme outlined by the Tuberculosis Association of India presents details of primary health care in tuberculosis (TB) for urban and rural areas and suggests measures for the involvement of general practitioners in the national TB programme. The following points are considered: need for identification of unknown cases by sputum/X-ray survey among symptomatics, especially in urban slums; refresher courses for practitioners; assistance from voluntary and welfare organizations; need for adequate equipment and staff in rural centres; upgrading of existing clinics and establishment of new clinics by central government; X-ray plants and microscopy centres; staff administration and supervision; and case-finding, treatment, BCG vaccination, and health education. Practitioners of indigenous systems of medicine should be involved and periodically given short reorientation courses in case-finding. (EB)

9143 **Tulchinsky, T.H., Lunenfeld, B., Haber, S., Handelsman, M.** *Israel health review.* Israel Journal of Medical Sciences (Jerusalem), 18(3), Mar 1982, 345-355. Engl.

After presenting some vital statistics on the Israeli population, the authors describe the country's health services organization with emphasis on the ministry of health and the health insurance funds. Health manpower is discussed in terms of personnel, facilities, and national expenditures. Policy directions include the regionalization of health services, prevention of life-style-related diseases, maternal and child health, environmental health, health information systems, health manpower planning, etc. (DP-E)

9144 **UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, Geneva.** *Action against tropical diseases; third annual report.* Geneva, UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, n.d. 32p. Engl.

The aims of the 3-year-old Special Programme for Research and Training in Tropical Diseases are to discover and develop new weapons for the fight against malaria, schistosomiasis, filariasis, African and American trypanosomiasis, leishmaniasis, and leprosy and to help institutions in the developing countries to become self-reliant in research. The programme has now funded 456 research projects, 320 of them during the period under review (July 1978-June 1979), and has awarded 144 grants for training and institution-strengthening. This annual report summarizes the programme's activities with respect to the aforementioned areas and briefly discusses programme administration, communications and information systems, financing, and cooperation with various drug companies. (HC-L)

9145 **Weekly Epidemiological Record, Geneva.** *International Centre for Diarrhoeal Disease Research, Bangladesh/Centre International de Recherche sur les Maladies Diarrhéiques, Bangladesh.* Weekly Epidemiological Record (Geneva), 56(16), 24 Apr 1981, 123-124. Engl., Fren.

The objectives and organization of the International Centre for Diarrheal Disease Research (formerly the Cholera Research Laboratory), Bangladesh, are briefly described. Their main activities are: 1) research in the areas of community services, nutrition, pathogenesis and therapy, and host defense; and 2) training courses of varying lengths for teachers, researchers, and extension workers. (DP-E)

9146 **Werner, R.** *Offentliches Gesundheitswesen, traditionelle chinesische Medizin, westliche Medizin, Barfussrzte und Heilmittelkunde in der Volksrepublik China. (Public health system, traditional Chinese medicine, Western medicine,*

barefoot doctors, and pharmacology in the People's Republic of China). Öffentliche Gesundheitswesen (Stuttgart, Germany FR), 43(10), 1981, 480-499. German. 13 refs.

In connection with the 1980 tour of 18 Chinese medical institutions by a German study group of medical specialists, this paper summarizes the major areas of the Chinese medical establishment, with an aim to promoting a better understanding of the system and thereby improving bilateral cooperation. Presented are the following descriptions: history of acupuncture, moxibustion, barefoot doctors, traditional and new Chinese medicine; organization and structure of public health services, governmental ministry of health, Academy of Traditional Chinese Medicine, Medical College in Beijing, and graduate schools; curricula for courses in nursing, midwifery, laboratory technology, and pharmacology; and fundamental techniques for exercises in health, sport, and self-defence. (EB)

9147 **Western, K.A.** *Organización y administración de los programas de control de las enfermedades transmissibles en los paises en desarrollo. (Organization and administration of communicable disease control programmes in developing countries).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 89(5), Nov 1980, 381-396. Span.

Also published in English in Bulletin of the Pan American Health Organization, 14(1), 1980.

Communicable disease control in the developing countries is at a crossroads. On the one hand, vertical programmes aimed at the eradication of a particular disease (with the notable exception of the smallpox programme) have failed to meet expectations, even losing ground of late. On the other, few examples of the successful integration of either two or more vertical programmes or vertical programmes and the primary health system have been forthcoming. This paper discusses the problems peculiar to the integration of vertical programmes with primary care and points out some prerequisites to its achievement. First among these is cooperation between epidemiologists and health planners. (HC-L)

9148 **Wickwar, H.** *Health service administration in China.* Journal of the South Carolina Medical Association (Florence, S.C.), 77(7), Jul 1981, 333-336. Engl.

The health services of the People's Republic of China are characterized in terms of inputs, outputs, and outcome. The inputs include plentiful manpower, scarcity of capital, low levels of productivity and purchasing power, and problems of leadership. The output — reasonably high quality health services that are available and accessible — is briefly described, although quality has been reduced by the Cultural Revolution. Some of the most important results have been indirect prevention associated with changes in the social, political, and economic order as well as the reduction in disease due to direct prevention. (DP-E)

II.3 Planning

See also: 9147, 9369, 9376, 9400, 9402, 9443, 9534.

9149 *Shattuck lecture — health care in the developing world: problems of scarcity and choice.* New England Journal of Medicine (Boston, Mass.), 305(19), 5 Nov 1981, 1117-1127. Engl. 38 refs. Bicentennial Meeting of the Massachusetts Medical Society, Boston, Mass., 31 Oct 1981.

In 1850, Lemuel Shattuck presented a report to the Massachusetts (USA) legislature describing health conditions in that state and suggesting public health measures for improving them; the same conditions prevail in many developing countries today. This article examines: stages in the evolution of health systems; obstacles to progress, including uneven distribution of health services, lack of appropriate technology, pharmaceutical policies, management of health resources, poverty, and financing of health services; efficiency and effectiveness in the use of resources; and the financial feasibility of primary health care. Statistical data are included. (DP-E)

9150 **Abramson, J.H.** *Regionalization of health services in Israel: health indicators for measuring the health status of a region.* Israel Journal of Medical Sciences (Jerusalem), 18(3), Mar 1982, 411-413. Engl.

Rather than compiling a list of all possible health indicators and considering each one separately, the author prefers to adopt a regionalized approach that permits the development of health programmes geared to local problems and circumstances. Financial and other constraints may also influence the type of data collected in a particular area. Since a nucleus of standard information for Israel as a whole is nevertheless still advisable, the author proposes a tentative list of indicators grouped into these broad categories: demographic characteristics and social indicators, mortality, diseases, disability and impairments, somatic characteristics, subjective well-being, and health-related behaviour. Each of these categories should be adapted to local needs. (DP-E)

9151 **Akin, J.S., Bilsborrow, R., Guilkey, D.K., Popkin, B.M., Benoit, D.** *Determinants of breast-feeding in Sri Lanka.* Demography (Ann Arbor, Mich.), 18(3), Aug 1981, 287-307. Engl. 31 refs.

In addition to demographic factors, socioeconomic factors influencing breast-feeding in Sri Lanka are discussed and analyzed in terms of policy implications affecting labour force, education, family planning, and internal migration. The paper also addresses a number of generally neglected statistical issues that should be considered in analyzing the determinants of breast-feeding, including problems resulting from digit preference or age heaping, the need to use dichotomous dependant variables, unavoidable truncation biases in the basic data, and structural shifts in the determinants of breast-feeding at different durations. (Modified journal abstract)

9152 **Allwood-Paredes, J.** *Food and nutrition planning in El Salvador.* Progress in Clinical and Biological Research (New York), 67, 1981, 505-513. Engl. 20 refs.

After presenting some background information on the nutritional status and land distribution problems of El Salvador, the author examines the two government-approved nutrition plans implemented in that country in the last 5 years — the 1st in 1978 and the 2nd in October 1979 by the revolutionary government. Although the latter is based on an overall strategy aimed at demolishing the economic and political structure of dominance by a wealthy minority and is therefore more concerned with social change than with the agricultural sector *per se* (it has, in fact, had a negative impact on already unstable patterns of food production and distribution), the author feels that it should nevertheless be considered a food and nutrition plan because, by eradicating poverty, it will eliminate the major cause of malnutrition. (DP-E)

9153 **Blair, P.** *Programming for women and health.* Washington, D.C., Equity Policy Centre, Jul 1980. 52p. Engl. 77 refs.

The 1st part of this paper deals with women's health in developing countries under the headings of personal health, reproductive health, and occupational health. The 2nd part discusses possible health policies that would improve the situation, emphasizing the importance of the participation of women and women's groups in the health care system. (DP-E)

9154 **Castelazo-Ayala, L., Karchmer, S.** *Medicina perinatal, implicaciones médico-sociales; 1: técnicas utilizadas en la identificación del embarazo de riesgo elevado. (Medicosocial implications of perinatal medicine; 1: techniques used to identify high-risk pregnancy).* Gaceta Médica de México (Mexico City), 115(4), Apr 1979, 157-160. Span. 11 refs.

See also entries 9129 and 9327.

This paper discusses various models for identifying high-risk pregnancies, emphasizing that the development of appropriate risk criteria for a given population is a prospective and dynamic process. In other words, in order for the classification system to be as sensitive as possible, it is important that records on not only the immediate outcome of pregnancy but also of the health of the child up to age 4 years be kept so that the system can be continuously readjusted and refined on the basis of these data. A list of prenatal and perinatal risk factors is included. (HC-L)

9155 **Cumper, G.** *Social and organizational constraints on health development.* Journal of Tropical Medicine and Hygiene (London), 85(2), Apr 1982, 47-55. Engl.

Improved health in developing countries depends on new emphases in health care that will require changes in behaviour and in the structure of health service organizations. Such changes cannot be affected quickly or easily: 'global strategies', and their nominal endorsement, are not enough. Paths of change must be developed in each country, some of which suffer from a shortage of required personnel. The results obtained may well fall short of, and differ in kind from, what is envisaged. (DP-E)

9156 **Cvjetanovic, B., Grab, B., Dixon, H.** *Epidemiological models of poliomyelitis and measles and their application in the planning of immunization programmes.* Bulletin of the World Health Organization (Geneva), 60(3), 1982, 405-422. Engl. 59 refs.

This report describes the construction and application of epidemiological models of measles and poliomyelitis. In these models, epidemiological classes and their age structure have been based on the natural history of these diseases in the population aged 0-19 years. The flow of the population through the classes has been expressed as an equation system suitable for computer interpretation. The models have been used to simulate both the natural course of the diseases and the effect of various immunization schemes. The models were also used to explore prospects for control and eradication of these diseases with specific immunization programmes, and their relative effectiveness and cost-effectiveness are discussed. (Journal abstract)

9157 **Donham, K.J., Mutel, C.F.** *Agricultural medicine; the missing component of the rural health movement.* Journal of Family Practice (New York), 14(3), 1982, 511-520. Engl. 29 refs.

Agricultural medicine encompasses the anticipation, recognition, diagnosis, treatment, prevention, and community health aspects peculiar to the USA's agricultural population of 10.4 million, whose major health problems include farm accidents, infectious diseases transmitted from livestock or the environment, respiratory diseases, agricultural chemicals, dermatoses, and cancer. Because the health needs of this population have been largely ignored unless they also happened to be members of a minority group, the authors suggest ways of recognizing and dealing with their special health problems, with emphasis on the education of rural practitioners. (DP-E)

9158 **Edeme, J.M.** *Social phenomena and the planning of nutrition education programme.* Social Science and Medicine (Aberdeen, UK), 15A(5), Sep 1981, 713-719. Engl. 14 refs.

This article presents, on the basis of a behaviour modification model by Van Beugen and data from case studies on food habits, proposals for the use of social data in planning a nutrition education programme. The author emphasizes that foodstuffs must be seen as elements in the sociocultural life of people. She also stresses that, at the end of a period of nutrition education, an adequate health care system should be left behind. Illustrative tables and charts are included. (DP-E)

9159 **Eisenzweig, A.Y.** *Israel's national center for public health — a novel conceptual approach.* Public Health Reports (Rockville, Md.), 97(3), May-Jun 1982, 251-257. Engl. 21 refs.

Public health in the 1980s is a comprehensive mixture of objectives and activities with a complex, multidisciplinary knowledge base. Those who adopt this perspective and attempt to put it into practice in the public health system of Israel encounter two formidable obstacles. One is the lack of a national forum where public health issues can be debated by representatives of the major health and medical institutions. The other is essentially conceptual; the Israeli health system has yet to adopt a common strategy for the long-term planning and training of members of the medical professions. This article considers a novel approach to these problems with special emphasis on the role of the proposed National Center for Public Health. (DP-E)

9160 **Hobdell, M.H., Sheiham, A.** *Barriers to the promotion of dental health in developing countries.* Social Science and Medicine (Aberdeen, UK), 15A(6), Dec 1981, 817-823. Engl. 35 refs.

There are many oral conditions resulting from poverty and undernutrition that are currently prevalent in developing countries, while few human or physical resources are available to meet these health needs. In establishing dental health services in these countries, there is a danger that attempts will be made to establish the same patterns of organization and to use the same technologies as those used in industrial nations; such direct transfers are often inappropriate because of the clear differences between industrialized and developing countries in their patterns of dental disease. Thus oral health policy must be integrated with general health policy and involve an awareness of the pertinent social, cultural, and economic factors. (Modified journal abstract)

9161 **Hussain, M.M.** *Progress towards health for all — the example of Maldives.* World Health Forum (Geneva), 2(1), 1981, 30-35. Engl.

The Republic of Maldives — with a population of 200 000 spread over 200 islands — presents a particular challenge to health services coverage. The government has taken a pragmatic approach to health planning that involves identifying and addressing the most pressing current problems — water-borne diseases, communicable diseases preventable by immunization, maternal and child health, malnutrition, and mosquito-borne diseases — and has set a number of ambitious but realistic targets to be achieved during the next two decades. This paper describes the present health and health services situation in the country and outlines the strategy of its new primary health care programme. (HC-L)

9162 **India, Ministry of Health and Family Welfare.** *Report of the Working Group on Health for All by 2000 A.D.* New Delhi, Ministry of Health and Family Welfare, 25 Mar 1981. 117p. Engl.

In 1980, India's Ministry of Health and Family Welfare set up a working group on health to review the country's current health status, to draw up a 5-year plan for the health sector and a procedure for implementing it, and to suggest specific programmes for underserved areas. This report reviews the discussions held at the group's four meetings and the findings of sub-groups on health indicators and strategies, intersectoral coordination, community involvement, the role of voluntary organizations, and health services organization. Included are lists of participants and copious statistical data. (DP-E)

9163 **International Children's Centre, Paris.** *Immunizations.* Paris, International Children's Centre, Jul 1979. 5p. Engl.

Also published in French and Spanish.

This bulletin presents some broad guidelines on immunization for policy-makers and government planners. The planning of programmes must include the definition of objectives, epidemiological surveys, and a decision on whether to include such programmes in an integrated maternal child health programme. The training of personnel at all levels, coupled with the education of the community, will be necessary, as will the provision of a cold chain. Recommended vaccination schedules from three different countries are presented. (DP-E)

9164 **International Children's Centre, Paris.** *Breast-feeding elements for a promotion policy for policy-makers.* Paris, International Children's Centre, Jun 1979. 8p. Engl.

After a review of the factors contributing to the decline of breast-feeding, arguments in favour of this practice are presented. These include: the advantages to the infant, e.g., protection from disease; family benefits such as cheaper cost and prolongation of infertility; and the effects on the community of lower infant mortality and the elimination from the economy of artificial infant foods. Once essential data have been collected, elements for a breast-feeding promotion policy should include socioeconomic and legislative measures, reorientation of the health services, and educational activities. (DP-E)

9165 **International Planned Parenthood Federation, Western Hemisphere Region, New York.** *Strategy for the development of sex education in Latin America.* New York, International Planned Parenthood Federation, Western Hemisphere Region, Oct 1977. 20p. Engl.

Expert Commission, New York, N.Y., 26-28 Oct 1976.

Originally published in Spanish.

An IPPF technical commission met in October 1976 to identify the needs of Latin American countries at the various stages of the process of developing sex education programmes. A descriptive model is used to show the phases through which sex education passes in the course of its development: perception, association, awareness, implementation, official acceptance, and consolidation. A series of recommendations to be used as a basic frame of reference for individuals, institutions, and governments is presented. In this regard, the areas covered include research, motivation, training, diffusion, standardization, programming and services. A list of conference participants and observers is included. (EB)

9166 **International Reference Centre for Community Water Supply and Sanitation, The Hague, Netherlands.** *Participation and education in community*

water supply and sanitation programmes: a literature review. 2 edition, rev. The Hague, International Reference Centre for Community Water Supply and Sanitation, Technical Paper Series, No. 12, Dec 1981. 222p. Engl.

This review was compiled to assist national development agencies in the design, testing, and implementation of community participation and education strategies in water supply and sanitation programmes. In addition to a summary and conclusions, separate chapters cover planning for participation and education in these programmes, the collection of information for and about the community, the methodologies and personnel needed for programme development, the establishment of environmental sanitation facilities, the planning and implementation of sanitation education programmes, planning for continuity, evaluation and community participation, and higher level support. Annexes contain lists of references, country and subject indices, samples, models, and checklists. (DP-E)

9167 **Jaitt, J.C.** *Objetivos de la atención primaria en odontología. (Objectives of primary care in dentistry).* Revista de la Asociación Odontológica Argentina (Buenos Aires), 69(5), Jul 1981, 283-285. Span. 11 refs.

The issue of primary dental care in Argentina is broadly discussed with reference to the present organization of dental services, government policy, and projected costs. The author feels that the goal of providing dental coverage to the entire population is not incompatible with continuing research and the development of dental specialties. (RMB)

9168 **Jegede, R.O.** *Nigerian psychiatry in perspective.* Acta Psychiatrica Scandinavica (Copenhagen), 63(1), 1981, 45-56. Engl. Refs.

The history of Nigerian psychiatry is reviewed and the main features and leading figures identified. The author then discusses future directions to be taken by Nigerian psychiatry if it is to meet effectively the challenges involved, of which the most prominent is providing services for a large and growing population living in rapidly changing times. (Modified journal abstract)

9169 **Jones, M.** *Nicaragua invests in health.* World Health (Geneva), Dec 1981, 14-17. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Despite economic and political problems, Nicaragua's government is attempting to change the country's former hospital- and city-oriented health care system by setting up 79 health centres in previously underserved areas and by emphasizing primary care and preventive programmes. While long-term plans stress health education, latrine construction, immunization, water supplies, and maternal child health, short-term improvements will be brought about by the activities of the Sandinista Defense Committees in the areas of health education and living conditions and by the efforts of the Nicaragua Demographic Association in the field of family planning. (DP-E)

9170 **Kickbusch, I.** *Involvement in health: a social concept of health education.* International Journal of Health Education (Geneva), 24(4), Oct-Dec 1981, Suppl., 1-15. Engl.

The author examines four conceptual reorientations that are coming to dominate health education in the developing world, specifically, changes from: health prescription to health promotion; individualistic behaviour modification to a systematic, public health approach; medical orientation to recognition of lay competence; and authoritarian to supportive health education. She then presents a social paradigm of health and discusses the three main programme areas (health promotion, preventive health education, and supportive health education) as well as strategies for their implementation. An outline of the 1984-1989 work programme of WHO's Regional Bureau for Europe concludes the article. (DP-E)

9171 **Krueger, T.** *Child health services in Colombia: developing preventive health care strategies in university-level hospitals.* Public Health (London), 96(1), Jan 1982, 31-42. Engl. 20 refs.

This report, based on a study of the history, extent, and impact of preventive health care practices for children in Colombia, aims to provide Colombian university-level hospitals with a preventive medicine strategy for improving their child health care services. The model proposed is based on a possible approach at the Children's Hospital of Bogotá but contains concepts and components that could be adopted at all major medical institutions. The model envisions the integration of preventive and curative medicine along with the development, through research and education, of selected health themes. Charts and some statistical data are included. (Modified journal abstract)

9172 **Laguna, J.** *National food and nutrition policies of Mexico.* Progress in Clinical and Biological Research (New York), 67, 1981, 491-496. Engl.

After briefly analyzing Mexico's nutrition problems and reasons for the limited achivements of previous health plans, the author relates the efforts of the secretary of health (which include cooperative rural works and supplementary rations for at-risk children, women, and hospital patients) and of the national system for family development to improve the nutritional status of low-income groups. He then describes the global development plan, launched on April 15, 1980, which is based on the Mexican alimentary system, a programme aimed at strengthening both food production and distribution. Other government policies for the production of basic foods are also considered. (DP-E)

9173 **Laurell, A.C.** *Mortality and working conditions in agriculture in underdeveloped countries.* International Journal of Health Services (Westport, Conn.), 11(1), 1981, 3-19. Engl. 51 refs.
Seminar on Biological and Social Aspects of Mortality and the Length of Life, Fiuggi Terme, Italy, 13-16 May 1980.

Socioeconomic processes occurring in the agricultural sector of the capitalist developing world over the past

two decades — mainly, the expansion of agribusiness, the monetarization of the rural economy, and the proletarization of the subsistence farmer — have had profound implications for health. While available data on morbidity and mortality among agricultural workers are insufficient for a systematic empirical knowledge of the problem, they are deemed adequate for the formulation of hypotheses and the definition of a methodology for future research, which this paper attempts to do. (HC-L)

9174 **Ledo Duarte, S.R., Cobas Manrique, J.** *Morbilidad y el proceso de planificación de la salud. (Morbidity and the health planning process).* Revista Cubana de Administración de Salud (Havana), 7(3), Jul-Sep 1981, 323-330. Span.
Segundo Congreso Nacional de Administración de Salud, Cienfuegos, Cuba, 2-4 Oct 1980.
This paper discusses the role and importance of morbidity and other statistical data in the health planning process in a socialist country such as Cuba. Briefly mentioned are potential sources of morbidity and other data, the most important indices and coefficients to be derived from them, and some factors to be considered when predicting the volume of service demand. The need for an information system that accurately reflects health planning needs is pointed out. (HC-L)

9175 **Mahler, H.** *Partnership for health for all; address to the WHO Regional Committee for South-East Asia.* WHO Chronicle (Geneva), 35(6), 1981, 203-207. Engl.
Also published in French, Russian, and Spanish.
The 1981 address to the WHO Regional Committee for South-East Asia by the Director-General of WHO is reproduced. The Committee members are urged to adopt the global strategy of health for all at the highest political level and to be prepared to make the necessary changes in the health system of each country and to cooperate with each other. The importance of primary health care and the role of the health worker as educator are emphasized. The potential obstacles are considered and the Committee is assured that each country will have the complete cooperation of WHO in the attempt to reach new levels of health. (DP-E)

9176 **Manchew, P., McIntosh, C.** *Approach to incorporating nutrient requirements into the Caribbean food and nutrition plan.* Cajanus (Kingston, Jamaica), 14(2), 1981, 84-92. Engl.
The multicausal nature of food and nutrition problems suggests an integrated multidisciplinary approach to their solution. Such an approach is being adopted in the development and implementation of the Caribbean Food and Nutrition Strategy. One objective of the Strategy is to ensure that the basic minimum nutrient requirements of all population segments are met. This note suggests appropriate energy and protein levels that could be achieved by the strategy and the manner in which these levels could be incorporated into a plan designed to address several other objectives and constraints. Statistical data are included. (Modified journal abstract)

9177 **Mandl, P.E.** *Social planning with the urban poor; new government strategies.* Assignment Children (Geneva), 57-58(1), 1982, 1-212. Engl.
The 1st part of this multidisciplinary journal contains an editorial on social planning with the urban poor and two articles concerning facts and figures on urbanization in the developing world and government strategies for urban areas and community participation. The 2nd part discusses four case studies of innovation approaches, which included extending municipal services by building on local initiatives in Rio de Janeiro; integrated basic services for Lima's "young towns"; restructuring services to reach the urban poor in Kuala Lumpur; and development councils for participatory urban planning in Colombo. The research section presents a summary of the Street Food project conducted by the Equity Policy Center in Washington, D.C., and an assessment of the child care needs of low-income mothers in developing countries. Statistical data are included. (EB)

9178 **McLeroy, K.R.** *Scope of work for the health outcome evaluation of the Health Sector Loan II Project in the Dominican Republic.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report No. 35, Feb 1982. 28p. Engl.
In 1978, the government of the Dominican Republic was awarded a US AID loan for the expansion of basic health services and the provision of water, latrines, and health education in approximately 500 rural communities. This report presents the scope of work and cost estimate for a 30-month evaluation of the project in terms of its impact on infant and preschool mortality, total mortality, and preschool nutrition status. It also defines the task requirements of the evaluation contractor and identifies the principal personnel required to do the job. (HC-L)

9179 **Mukerji, K.** *Basisgesundheitseinrichtungen in Entwicklungslndern/Primary health care facilities in developing countries.* Starnberg (Germany FR), Institute for Building in the Tropics, 1981. 190p. Engl., German. 156 refs.
This report — the 6th in a series on social infrastructure in the developing countries — is addressed to those involved in the planning and implementation of primary health facilities. Its aim is to increase awareness of the problems and possibilities of various design concepts by presenting case studies of examples of health centres in Thailand, Indonesia, Korea, Togo, Ghana, Liberia, Guatemala, and Nicaragua, respectively. Then, on the basis of these and other sources, it sets forward a number of design guidelines and standards relative to the various services offered in a primary health centre. Case studies are illustrated by means of line drawings and a few photographs each. (HC-L)

9180 **Navas, H.J.** *Necesidad de planificar. (Need for planning).* Acta Odontológica Venezolana (Caracas), 18(1), Jan-Apr 1980, 97-100. Span.
The author stresses the need for improving dental services planning in Venezuela and presents seven proposals for achieving this goal. These include: increasing the national budget to provide better coverage to marginal

and rural groups; more training of all levels of auxiliaries; streamlining administrative procedures; reinforcing the data collection, communications, and transport systems; and improving cooperation among the various dental health institutions. (RMB)

9181 **Newsette, Manila.** *Primary health care: Philippine policy paper.* Newsette (Manila), 21(1), Jan-Mar 1981, 19-21. Engl.

After an examination of the objectives and strategy of primary health care in the Philippines, the names and roles of the organizations comprising its institutional framework are listed and described. Financial, manpower, and other resources are briefly discussed. Nine guidelines are presented for policy-makers; these emphasize community involvement and the integration of primary care into other health and development programmes. The legal basis for primary care is briefly reviewed. (DP-E)

9182 **Noordin, R.A.** Southeast Asian Medical Information Centre, Tokyo. *Development of operational, performance and impact indicators with special reference to community health.* Tokyo, Southeast Asian Medical Information Centre, SEAMIC Publication, No. 17, 1979. 199p. Engl. Refs.

Sixth SEAMIC Workshop, Kuala Lumpur, Malaysia, 13-19 Feb 1979.

This report of the 6th SEAMIC workshop contains: the texts of the opening, welcoming, and minister's addresses; an introduction; a list of objectives, which included pointing out the weaknesses of present health indicators and developing new and more useful ones for planning, managing, and evaluating health activities; a description of the workshop's organization and proceedings; guidelines for the preparation of country reports, which were presented by Indonesia, Malaysia, Singapore, Thailand, Australia, Fiji, India, Japan, and South Korea; and the speeches from the closing ceremony. The appendices comprise the work programme, a definition of primary health care, and lists of references, participants, observers, consultants, and resource personnel. (RMB)

9183 **Okunade, A.O.** *Visual, auditory and physical handicaps in Nigerian children.* International Nursing Review (Geneva), 28(6), Nov 1981, 176-177. Engl.

A survey of Nigerian children reveals that 7.3% of the preschoolers screened had visual defects, 16.4% had hearing impairments, and 4.8% had some form of physical disability; the results from a comparable group of primary school students were 9.6%, 6.3%, and 0.4%, respectively. The author discusses the policy implications of her findings with regard to screening and the planning of suitable services for the disabled. (DP-E)

9184 **Pheon, W.O.** *Recent developments in occupational health in tropical countries.* Tropical Diseases Bulletin (London), 79(8), Aug 1982, 653-666. Engl. Refs.

Recent developments in occupational health in the tropics are discussed; it is noted that in modern times there has been an unprecedented transformation in life-style for many of the people in the tropics. Information is scanty concerning the prevalence and presentation of problems; the strengthening of occupational health services will help to overcome this. Problems shared with developed countries, as well as problems peculiar to the tropics, are discussed. The training of medical, nursing, and engineering students in occupational health is advocated and new challenges and opportunities in this area are considered. Statistical data are included. (DP-E)

9185 **Ray, D.B.** *Conceptual framework of planning a people-oriented hospital and peripheral health maintenance services.* Health and Population — Perspectives and Issues (New Delhi), 3(4), Oct-Dec 1980, 299-315. Engl. 8 refs.

For development of a people-oriented hospital and primary care facilities in India's peripheral health maintenance services, a rethinking of the planning concepts of the roles, attributes, and various components is required. The emphasis in discussion of the various elements of the planning process is on need-orientation for the rural disadvantaged and availability of limited resources. (Modified journal abstract)

9186 **Reyes, M.A.** *Colombian food and nutrition policies.* Progress in Clinical and Biological Research (New York), 67, 1981, 497-503. Engl.

After analyzing, with the help of several tables, nutrition and food availability in Colombia, the author considers the main factors contributing to malnutrition in that country — principally, poverty, lack of food, and poor environmental and general health conditions. The national food and nutrition plan, which was designed to combat these problems by delivering specialized services in the areas of primary care, environmental sanitation, nutrition education, food production and distribution, and nutritional surveillance and evaluation, is described. (DP-E)

9187 **Rivera Duelo, J.** *Health policy and the politics of health: priorities and planning for health care in Puerto Rico.* Journal of the National Medical Association (New York), 73(8), Aug 1981, 713-716. Engl.

Ninth Annual Scientific Assembly of Region I of the National Medical Association, San Juan, Puerto Rico, 23 May 1980.

Puerto Rico's health services policy is based on a framework of seven principles: emphasizing prevention, restructuring ambulatory care, fostering the area concept, strengthening the role of regional hospitals, redistributing health personnel, giving special attention to mental health, and coordinating the public and private sectors. Priorities within each area are identified as an aid to establishing policy. Some problems involved in implementing these principles are briefly discussed. (DP-E)

9188 **Ruiz de Chávez, M.** *Sistemas de evaluación en el sector salud; límites para su desarrollo. (Evaluation systems in the public health sector; limits*

on their development). Salud Pública de México (Mexico City), 23(2), Mar-Apr 1981, 199-206. Span. 15 refs.

Health services can be evaluated in terms of outcomes and benefits, productivity, standards of practice, accessibility, acceptability, costs, and efficiency, but any evaluation system must first overcome a set of interactive structural and methodological problems. To assure its usefulness and feasibility the system has to be an integral part of the health services, linked to the decision-makers, and carried out with expert personnel, while the results must be presented in a concise and timely report, written in a simple language, and not used as an instrument for punishment but as a resource to improve the efficiency and effectiveness of the health programmes. (Modified journal abstract)

9189 **Sai, F.T.** *Population and national development — the dilemma of developing countries.* London, International Planned Parenthood Federation, 1977, 31p. Engl. 21 refs.

This essay describes the relationship of population to the overall development process. The following aspects are considered: world population and future trends; reasons for the population explosion; the structure of populations; development inequalities; urbanization; education; employment and labour; food, nutrition, and health; population and the development crisis; and population and family planning programmes. In conclusion, the author stresses the need for balanced, integrated, and comprehensive population and people-oriented development programmes. Statistical data are included. (EB)

9190 **Stillman, J.B.** *Adapting the tracer method of care assessment for use in developing countries.* Quality Review Bulletin (Chicago, Ill.), 8(3), Mar 1982, 6-9. Engl.

First developed and applied in the USA, this method of evaluating outpatient care involves the use of certain prevalent medical conditions known as "tracers". The application of the tracer method to health care delivery systems in developing countries is discussed, with emphasis on the use of nutritional or nutrition-related conditions as tracers, each of which is assessed in terms of impact, ease of diagnosis, type of and response to treatment, non-medical effects, and geographical prevalence. Some of the advantages and disadvantages of the method as a whole are examined. (DP-E)

9191 **Van Damme, J.M.** *Strategies for water supply systems in developing countries.* Science of the Total Environment (Amsterdam), (18), 1981, 307-315. Engl.

Among the major water supply problems in developing countries are the lack of qualified manpower, inadequate management, and limited financial resources. In these countries, the introduction of water reuse practices would be an obvious option. While the reuse of water for human consumption should be avoided, there is ample scope for the promotion of other water reuse practices, especially in the more developed areas. The International Drinking Water Supply and Sanitation Decade (1981-1990) appears to be the right context for cooperatively studying the feasibility of research in this field. (Modified journal abstract)

9192 **Warner, D.B., Woold, K.** *Tanzania Health and Environmental Monitoring Project (HEMP); recommendations for project paper design team.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report No. 8, 13 Mar 1981. 22p. Engl.

The Dar Es Salaam Sewerage and Sanitation Plan, Tanzania, provides for both sewered facilities and non-sewered facilities (mainly, ventilated, improved pit latrines) on a planned continuum. US AID has expressed inteest in monitoring the latter component of the plan — called the low cost sanitation unit — for its effects on health. This paper examines the various resources for and constraints to such an evaluation, identifies the issues that it must address, and makes recommendations regarding the kind of design team and workshop required to produce an appropriate evaluation methodology. (HC-L)

9193 **WHO, Brazzaville.** *African response to the global philosophy of action for health.* Brazzaville, WHO, AFRO Technical Papers, No. 18, 1981. 121p. Engl. Refs.

From an initially divergent position, the attitudes and approaches of health planners and policy-makers in Africa have during the last decade moved more and more into line with the methods and goals proposed by WHO, whose policies have also been transformed by input from the African nations. This document examines this process of change and reconciliation in a series of 280 points grouped under these broad headings: the search for a healthy moral climate in WHO in the service of health development, WHO activities, health for all by the year 2000, social policy and health development, towards health for all, the struggle for health, the WHO desired, and making full use of WHO. (DP-E)

9194 **WHO, Geneva.** *Target "Health 2000".* World Health Forum (Geneva), 2(1), 1981, 36-45. Engl.

This paper summarizes individually the efforts that the following countries are undertaking in order to achieve Health for All by the year 2000: Burma, India, Indonesia, Malaysia, Mongolia, the Philippines, Sri Lanka, Sudan, and Thailand. Programmes from other parts of the world are to appear as submitted in future issues of World Health Forum. (HC-L)

9195 **WHO, Geneva.** *Health for all: an alternative strategy.* World Health Forum (Geneva), 2(4), 1981, 500-511. Engl.

In India, a number of groups of experts have been convened to examine the nation's health services and chart a path toward meeting health needs more effectively. In this report, a study group set up jointly by the Indian Council of Social Science Research and the Indian Council of Medical Research examines with a critical eye the achievements and shortcomings in health improvement since independence and proposes a reorgani-

zation of services that would take account of the country's unique socioeconomic and cultural conditions. (Modified journal abstract)

9196 **WHO, Geneva.** *Least developed countries: a substantial new programme of action for the 1980s.* WHO Chronicle (Geneva), 35(6), 1981, 223-226. Engl.

Also published in French, Russian, and Spanish. Of every 1 000 children born in the 31 least developed countries (LDCs), 200 die within a year and another 100 before the age of 5 years; only 500 survive to the age of 40 years. Average life expectancy in the LDCs is 45 (compared to 60 in other developing countries and 72 in industrialized countries). These and other statistics reflect but dimly the reality of the vicious circle in which the people of the LDCs are trapped, where poverty, malnutrition, disease, and despair sap their energy, reduce their work capacity, and erode their ability to plan for the future. The Substantial New Programme of Action for the 1980s for the LDCs adopted at a recent United Nations conference, briefly discussed here, aims to help them to break out of that trap. (Modified journal abstract)

II.4 Geographical Distribution of Health Services and Workers

9197 **Bennett, V.L., Eaton, D.J., Church, R.L.** *Selecting sites for rural health workers.* Social Science and Medicine (Aberdeen, UK), 16(1), 1982, 63-72. Engl. 41 refs.

This paper presents a computerized technique for selecting health centre sites that can be applied by health planners in a variety of political, geographic, and social settings. This method is illustrated with results from a planning application in rural Valle del Cauca, Colombia. Factors considered when selecting a site included population, travel time and distance, travel altitude, presence or absence of a hospital, electricity, and potable water. (DP-E)

9198 **Doron, H.** *Regionalization of health services in Israel: significance and frameworks.* Israel Journal of Medical Sciences (Jerusalem), 18(3), Mar 1982, 357-363. Engl.

The concept of regionalization is discussed in terms of three major elements of a health care system: economic planning, health manpower, and the organization of services. The general objectives of regionalization in the Israeli context at the levels of local delivery, district administration, and national policy-making and with regard to hospital care are analyzed. The minimal requirements for the effective regionalization of Israel's health are set forth in seven points. (DP-E)

9199 **Friedman, E.** *New life for the country doctor.* Hospitals (Chicago, Ill.), 53(18), 16 Sep 1979, 139-140, 142, 144-145. Engl.

Begun in 1973, Health Systems Research Institute (HSRI), a hospital and clinic system based in Utah (USA), is successfully recruiting physicians for rural areas through the creation of a "dispersed group practice". Designed to counteract factors prejudicing doctors against rural areas, the HRSI practice provides insurance, free facilities, continuing education, consultant specialists, ample salaries, substitute physicians during travel and vacation time, and full management support. HRSI physicians can also be hired by rural communities during the absence of their own resident doctors. The recruitment process is described and the future of the system considered. (DP-E)

9200 **Ibarra, L.G.** *Rehabilitationsdienste in territorialen Gesundheitseinrichtungen. (Rehabilitation services of territorial medical facilities).* Zeitschrift für die Gesamte Hygiene und Ihre Grenzgebiete (Berlin, Germany DR), 27(2), 1981, 111-113. German.

This paper provides a brief history of Mexico's 1st institutions for the handicapped, which included the national school for the deaf (established 1861) and the national school for the blind (1870), and describes the main objectives of the ministry of health's 1971 national rehabilitation programme. Since 1974, 16 rehabilitation and special education centres (CREEs) have been established in 15 states of the republic, providing a wide range of specialized services to many of Mexico's estimated 4.6 million handicapped people. Future plans include expansion of rehabilitation services for rural areas and provisions for an additional 16 CREE facilities. (EB)

9201 **Ottensmeyer, D.J., Smith, H.L.** *Rural health care: opportunities for established group practices.* New England Journal of Medicine (Boston, Mass.), 306(2), Jan 1982, 74-78. Engl. 10 refs.

Many rural areas of the USA are considered medically underserved. At the core of this underservice is a lack of physicians. Physicians are not attracted to rural regions for a variety of personal and professional reasons. This article explores the role of established group practices in dealing with these barriers by using a model of small associated group practices created in rural communities in association with a larger established group practice located elsewhere. The use of this model by a medical foundation in New Mexico in creating several group practices is also described. (Modified journal abstract)

II.5 Financial Aspects

9202 **Hu, T.W.** *Issues of health care financing in the People's Republic of China.* Social Science and Medicine (Aberdeen, UK), 15C(4), Dec 1981, 233-237. Engl. 17 refs.

The major issue in health care financing in the People's Republic of China is how to allocate limited resources to provide effective health care services for a population of about 900 million. There are three major types of health care insurance coverage in China: public expenses medical insurance, labour medical, and cooperative medical services. There are also a number of strategies

for cost containment (visit fee, referral system, herbal medicine), and the central government provides a minimum of direct subsidies while emphasizing community participation. This approach may well be worthy of serious consideration by other developing countries. (Modified journal abstract)

9203 **Lipscomb, J.** *Deregulation of paraprofessionals and health care cost containment: the case of dentistry.* Policy Studies Review (Urbana, Ill.), 1(3), 1982, 523-531. Engl. Refs.
Symposium on Regulatory Policy Analysis, Chicago, Ill., 3-4 Dec 1979.
In an effort to determine whether or not the deregulation of paraprofessionals would help reduce costs in the dental health sector, the author studies the operations of expanded function dental auxiliaries (EFDAs) under indirect dentist supervision and under the traditional system of direct dentist supervision. He then considers some of the political economy theories concerning the dental care market and stresses the need to construct new ones incorporating the concept of the EFDA. (DP-E)

9204 **Medina, G.** *Proyecto de sistema de entrega de salud rural integrado; saneamiento rural. (Integrated rural health care delivery system: rural sanitation).* Arlington, Va., Water and Sanitation for Health Project, WASH Field Project No. 13, Mar 1981. Engl.
This report describes a US AID-supported project designed to bring water supply and waste disposal facilities to rural Ecuador. Included in the description are the following: the type of technologies involved; the role of the communities in the construction and maintenance of facilities; and the technical capability of the Ecuadorian institute of public workers and its accomplishments to date. (HC-L)

9205 **Sekhar, C.C., Raina, R.K., Rao, P.G.** *Drug scene in Ethiopia.* East African Medical Journal (Nairobi), 57(1), Jan 1980, 44-47. Engl.
Developing countries depend mostly on outside sources for their drug needs. Almost 40% of the total health care budget of these countries is spent on drugs alone, leaving fewer funds available for other health service needs. This problem is further magnified by limited economic resources, rising cost of drugs, shortage of trained medical personnel, and lack of an organized drug policy. The authors discuss this problem with reference to Ethiopia. (Modified journal abstract)

II.6 Cultural Aspects

See also: 9301, 9303.

9206 **Adjanohoun, E.J., Ahyi, A.M., Ake Assi, L., Dan Dicko, L., Daouda, H.** *Médecine traditionnelle et pharmacopée; contribution aux études ethnobotaniques et floristiques au Niger. (Traditional medicine and pharmacopoeia; contribution to ethnobotanical and floral studies in Niger).* Paris, Agence de Coopération Culturelle et Technique, 1980. 251p. Fren. 21 refs.
The Agency for Cultural and Technical Cooperation, Paris, France, has sponsored a series of multidisciplinary investigations into the identification and use of medicinal plants in a number of African countries. This report of the Niger expedition presents in alphabetical order line drawings and descriptions of 146 plants and their medicinal uses. It also lists the most common diseases and how medicinal plants are used in their treatment. Items are indexed by Latin name, common French name, and common names used by five local ethnic groups. (HC-L)

9207 **Chen, P.C., Gottlieb, O.R., Lantum, D.N., Marini Bettolo, G.B., Polunin, I.** *Discussion.* World Health Forum (Geneva), 3(1), 1982, 14-26. Engl.
This discussion groups together the thoughts of a number of writers on these topics: training primary care workers in the use of herbs; the scientific investigation of the properties of medicinal plants; the incorporation of traditional medicine into the health care system: the role of plants in medicine; traditional medicine as a predominantly social activity; the non-traditional nature of the Arab, Chinese, and Indian systems of medicine; the training of traditional practitioners; and the recognition of the fact that some traditional practitioners may not be usable or trainable. (DP-E)

9208 **Edwards, G., Arif, A.** WHO, Geneva. *Drug problems in the sociocultural context: a basis for policies and programme planning.* Geneva, WHO, WHO Public Health Papers, No. 73, 1980. 258p. Engl. Refs.
On the premise that drug use can only be understood to the context of the societies and cultures in which the users live, this book presents case studies on drug use from different parts of the world (e.g., smoking opium in Pakistan and cannabis in Jamaica, inhaling solvents in Mexico City, chewing coca leaves in the Andes, etc.), on a variety of approaches used to deal with drug problems in various countries, and on examples of prevention of drug abuse through reduction in demand. Each series is followed by a summary and analysis of the experiences presented. Additional chapters outline the work of WHO and other international organizations with respect to drug problems, examine questions related to national policy-making and programme-planning, and consider current trends in thinking on drug issues and their implications for national and international policies. (HC-L)

9209 **Edwards, N.** *Primary health care; the elusive dream.* CUSO Forum (Ottawa), 4(1), Spring 1982, 41-43. Engl.
Also published in Canadian Nurse (Ottawa), 77(10), Nov 1981.
The author examines a number of obstacles to implementing primary care in developing countries. In societies where ill health is fatalistically accepted as the will of God, profound social change is necessary before people realize that they can exercise some control over their

lives, but such change can only be brought about by education. Health professionals, however, may wish to impede this change, because once people begin to question the way things are, they may also question the infallibility of health care providers — a development for which health workers may not be prepared. (DP-E)

9210 **Greenwood, B.** *Cold or spirits? Choice and ambiguity in Morocco's pluralistic medical system.* Social Science and Medicine (Aberdeen, UK), 15B(3), Jul 1981, 219-235. Engl. 28 refs.

The two medical traditions that make up Arabic medical science remain as separate but complementary elements of Morocco's present pluralistic system. Prophetic medicine is concerned with spirit aetiologies and Galenic humoral medicine with environmental factors. This article examines the interaction of the systems in relation to an ambiguous group of illnesses for which there is little effective treatment. The Moroccan response to them, especially in the determination of the cause (cold environment or spirit encounter) relates the private experience of organic illness to shared social categories in a way that may have value from the biomedical viewpoint. (DP-E)

9211 **Hamnett, M.P., Connell, J.** *Diagnosis and cure: the resort to traditional and modern medical practitioners in the North Solomons, Papua New Guinea.* Social Science and Medicine (Aberdeen, UK), 15B(4), Oct 1981, 489-498. Engl. 34 refs.

Beliefs about illness and health practices in two Melanesian societies in Papua New Guinea are analyzed. Sorcery and supernatural sanctions are still considered important causes of illness and consequently exercise a form of social control, although many sicknesses are felt to be without understandable cause, even those responding to Western treatment. There are a variety of traditional practitioners whose cures are constantly changing. The introduction of modern medicine has only slightly affected local beliefs about illness. Since both modern and traditional practitioners view medicine as a means of treating symptoms, the two systems could be complementary. (Modified journal abstract)

9212 **Hosken, F.P.** *Female genital mutilation in the world today: a global review.* International Journal of Health Services (Westport, Conn.), 11(3), 1981, 415-430. Engl. 32 refs.

Extensive research and field work have established that more than 74 million women and female children are mutilated by female genital operations in Africa alone. The operations are also practiced in many parts of the Middle East and, with the Muslim religion, were introduced into Indonesia and Malaysia where they are performed at the present time in a less damaging form. This paper lists the countries where instances of incision and infibulation have been reported and include case reports from the Sudan, Egypt, Ethiopia, Kenya, Somalia, Nigeria, Mali, Upper Volta, and Senegal. The ethical issues posed by genital mutilation are also discussed. (Modified journal abstract)

9213 **Imperato, P.J.** *Modern and traditional medicine: the case of Mali.* Annals of Internal Medicine (Philadelphia, Pa.), 95(5), 1981, 650-651. Engl.

The organization of Mali's Western and traditional medical systems is briefly reviewed. Surveys of practitioners of both systems have indicated that most would be willing to work with practitioners of the opposite system; midwives were found to be both the most cooperative and the only Western health workers to whom traditional practitioners as a group had few objections. Because of the difficulties involved in integrating the two systems and Mali's constantly changing society, the author advocates the adoption of a *laissez-faire* attitude toward traditional medicine while encouraging limited cooperation in such areas as psychiatric care. (DP-E)

9214 **Kimani, V.N.** *Attempts to coordinate the work of traditional and modern doctors in Nairobi in 1980.* Social Science and Medicine (Aberdeen, UK), 15(3), Jul 1981, 421-422. Engl.

When interviews with *waganga* (traditional practitioners in Nairobi, Kenya) revealed that the majority would be interested in some sort of formal system, in cooperating with Western doctors, and in enrolling in a training course if one were available, these healers were asked for suggestions for implementing these objectives. On the basis of their recommendations, a preliminary training programme was organized for 24 *waganga*, consisting of 2-hour lectures twice a week on topics such as diarrhea, first aid, health of the newborn, etc. The course was well-received by the participants and should be continued, because experience has shown that traditional practitioners can be invaluable in activities such as sputum collection. (DP-E)

9215 **Kimpianga, J., Makaniah, M.** *Structure multidimensionnelle de guérison à Kinshasa, capitale du Zaïre. (Multidimensional structure of healing in Kinshasa, capital of Zaire).* Social Science and Medicine (Aberdeen, UK), 15B(3), Jul 1981, 341-349. Fren. 31 refs.

Traditional medicine is very much alive in Kinshasa, Zaire, partly because (modern) health sector growth has not kept pace with population growth but also because of the traditional attitude that physiotherapy needs to be complemented by treatment of the social and psychic aspects of disease if it is to be effective. On the basis of interviews with traditional healers in Kinshasa, statistical data from the Kinshasa Medical Inspectorate, and the literature on traditional Kongo medicine, this paper discusses the causal theory of disease, the principal elements of the medical system, the various kinds of medical practitioner, and the recent evolution of traditional practice among the Kongo people of Zaire. (HC-L)

9216 **Kohler, G.K.** *Begegnung mit der chinesischen Psychiatrie; I: Traditionelle Medizin und Psychiatrie in China. (Encounter with Chinese psychiatry; I: traditional medicine and psychiatry in China).* Muenchener Medizinische Wochenschrift (Munich, Germany FR), 123(32/33), 7 Aug 1981, 1239-1242. German.

This article is the 1st part of a series of reports describing a May 1980 visit by a group of German neurologists to psychiatric institutions in the People's Republic of China. A brief review of psychotherapy methods throughout the centuries is followed by a description of China's current system of psychiatric care. Today, fundamentals of traditional diagnostic and therapeutic techniques are being investigated by modern scientific methods and the problems of a combination of traditional and Western techniques are being studied. In the rural area surrounding the city of Shanghai, psychiatric specialists are training barefoot doctors to detect mental illness, with an aim to establishing a treatment chain linking communal and metropolitan clinics. The facilities and treatment methods of several psychiatric institutions toured by the group are described. (EB)

9217 **Maturan, E.G.** *Bohol culture: implications for health and family planning promotion.* Studies in Family Planning (New York), 10(6/7), Jun-Jul 1979, 189-192. Engl.
See also entry 9799.

This paper reviews the beliefs and practices of the inhabitants of Bohol province, the Philippines, with respect to conception and pregnancy, childbirth and infancy, puberty and adolescence, marriage and family life, sickness and death, and family decision-making. It is noted that whereas the promotion of maternal and child health coincides with local values, the restriction of reproduction runs counter to them. Nonetheless, the fact that the stated desired number of children was four while the actual number was more than six per family, leads the author to conclude that there is real potential for family planning in the community if the subject is handled with sensitivity. (HC-L)

9218 **Rappaport, H., Rappaport, M.** *Integration of scientific and traditional healing: a proposed model.* American Psychologist (Washington, D.C.), 36(7), Jul 1981, 774-781. Engl. Refs.

Traditional healing is viewed as a distinctly different system that has a different model of disease and that operates within a different world view. Because of perceived clashes in values between the traditional and Western systems, differences in their manipulations of expectancy, and the degree to which the systems differ in healer charisma, an alternative to a model of integration is proposed. It is concluded that the Western and traditional systems are complementary and should be constructed to function alongside one another. A delivery system comparable to the Western approach to psychosomatic medicine is suggested. (Modified journal abstract)

9219 **Rosenthal, M.M.** *Political process and the integration of traditional and western medicine in the People's Republic of China.* Social Science and Medicine (Aberdeen, UK), 15A(5), Sep 1981, 599-613. Engl. 21 refs.

The author discusses the evolution of health policy in the People's Republic of China *vis-à-vis* the integration of traditional and Western medicine and — on the basis of a study tour involving visits to 17 different health facilities and conversations with several dozen health workers — attempts to characterize the form in which it exists today. It is noted that Western doctors have been reluctant to accept traditional medicine and that the China Medical Association has successfully resisted Chairman Mau Tse Tung's call for a 'United Front'. On the other hand, traditional medicine and practitioners are found everywhere but dominated by a Western frame of reference and Western-trained physicians. Traditional theory and diagnosis have been generally rejected while selective assimilation of traditional treatment — principally acupuncture and herbal remedies — are commonplace. Research into the scientific basis of these practices continues. (HC-L)

9220 **Taba, A.H.** *Female circumcision.* Tropical Doctor (London), 10(1), Jan 1980, 21-23. Engl.

The author reviews the history, cultural beliefs, and serious complications of female circumcision and discusses the efforts made by different countries and by WHO to discourage the practice. These include legislation and health education programmes. (DP-E)

9221 **Yoder, P.S.** *Knowledge of illness and medicine among Cokwe of Zaire.* Social Science and Medicine (Aberdeen, UK), 15B(3), Jul 1981, 237-245. Engl. 39 refs.

This paper analyzes the structure of Cokwe medical knowledge in the context of the occurence of illness in Zaire. Their knowledge of illness and medicine grows out of several centuries of contact with neighbouring peoples and, recently, with Europeans. Cokwe classification of diseases in based upon a series of principles by which diseases are identified. The ascription of causation is more important in the choice of treatment than in the diagnosis of disease. Causal explanations change when illnesses are unresponsive to treatment. One can best understand the importance of the various categories of medical knowledge when those categories are placed within specific episodes of illness. (Modified journal abstract)

II.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition and Disease Control Studies

See also: 9102, 9135, 9152, 9158, 9161, 9176, 9367, 9443, 9453, 9458, 9594, 9644, 9690, 9691, 9740.

9222 **Abolaria, M.D.** *Guinea worm infection in a Nigerian village.* Tropical and Geographical Medicine (Haarlem, Netherlands), 33(1), Mar 1981, 83-88. Engl. Refs.

All 1 678 inhabitants of Wawa Village, Kwara State, Nigeria, were examined for guinea worm infestation and all local sources of water for the intermediate host. Ninety-eight individuals were found to be affected and the source of contamination was identified as a cattle pond from which drinking water was commonly obtained. Few of the villagers sought modern medical

treatment for the disease, believing traditional treatment to be more effective. Guinea worm is considered a minor parasitic disease, but it occasions much misery and loss in terms of working hours. An interdisciplinary approach to its control — involving, in this case, a piped water supply — is advocated. (HC-L)

9223 **Badr, I.A., Qureshi, I.H.** *Trachoma and Saudi Arabia.* Saudi Medical Journal (Riyadh, Saudi Arabia), 3(1), Jan 1982, 53-56. Engl. 15 refs.

The history of trachoma and its diagnosis, clinical features, and epidemiology in various parts of the world are briefly presented. The authors then deal with trachoma in Saudi Arabia, where it is endemic but is becoming less severe. Suggestions for trachoma control are given. It is important to identify those at risk and to provide mass treatment in areas of high prevalence; health education is also strongly advocated. Statistical data are included. (DP-E)

9224 **Barata da Silveira, M.A.** *Combate à esquistossomlase. (Fight against schistosomiasis).* Revista Brasileira de Medicina (Rio de Janeiro, Brazil), 38(11), Nov 1981, 691-699. Portuguese. Refs.

After reviewing, with the help of maps, the distribution of schistosomiasis and its hosts in Brazil, the author discusses the principal drugs and chemical agents now used to combat this disease. The chemical structure of some of these medications is analyzed by means of drawings and their side effects, dosages, and effectiveness against other diseases are discussed. A few pesticides are also considered. (RMB)

9225 **Barrera Z., G.** *Lactancio natural; revisión de algunos conceptos. (Breast-feeding; a review of some concepts).* Revista Colombiana de Pediatría y Puericultura (Bogotá), 32, 1980, 16-32. Span. 45 refs.

With reference to studies of breast-feeding from various parts of the world, this paper discusses the nutritional superiority and other advantages of breast-feeding over artificial feeding, pointing out the dangers associated with bottle-feeding and early weaning in the developing countries. It then examines the reasons for the decline of breast-feeding in Colombia as elsewhere, disputing the popular notions that maternal work or maternal malnutrition are responsible for the trend toward bottle-feeding and implicating other psychological and sociological factors. Fourteen tables and six graphs are included. (HC-L)

9226 **Belizán, J.M., Delgado, H., Mejía-Pivaral, V., Valverde, V., Klein, R.E.** *Criteria for selection of communities in poor rural areas with high risk of low birth weight babies.* Journal of Tropical Medicine and Hygiene (London), 84(6), Dec 1981, 243-248. Engl. 18 refs.

This paper presents and discusses the findings of a study of the determinants of low birth weight in 10 communities of rural Guatemalans living and working on coffee plantations in employer-built dwellings. In addition to the expected positive correlation between birth weight and maternal weight and maternal food intake, significant correlation was observed between birth weight and literacy, type of cooking arrangement (responsible for more or less carbon monoxide in the home), and ease of access to a larger population centre. Factors such as these can be used as simple indicators for identifying communities most in need of health and nutrition interventions. (EB)

9227 **Brandt, H.** *Work capacity restraints in tropical agricultural development.* Frankfurt am Main, Peter D. Lang, Medizin in Entwicklungsländern, Vol. 8, 1980. 278p. Engl. 187 refs.

Given the frequent observation that the work capacity of a tropical rural population is rather restricted, the author examines whether this may be attributed to the immediate influence of the tropical climate and/or the state of health of the working population, and what influence work capacity restraints per worker have on agricultural development and planning. Areas covered include the following: population growth, agricultural progress, and individual working hours; strain of manual work under tropical climate conditions; problems of agricultural project execution with low-level peasant work output; and employment target and subsidy incidence in projects. Statistical data and a copious bibliography are included. (EB)

9228 **Cambournac, F.J.** *Serious threat of reintroduction of endemic malaria in Portugal.* In Gebhart, J.A., Cerny, K., eds., Symposia o Problematice Zdravotnictvi ve Vxtahu k Rozvojovym Zemin, Prague, Univerzita Karlova, 1981, 33-58. Engl. For complete document see entry 9253.

The last indigenous case of malaria occurred in Portugal in 1959, but the existence of a suitable vector, *Anopheles maculipennis atroparvus* makes its reestablishment a possibility. The risk of reintroduction peaked during the late 1960s up to the mid-1970s when up to 5 million individuals per year (many of them troops returning from the former Portuguese colonies in Africa) entered the country from tropical areas. This paper describes the case-finding and surveillance methodology that was put into effect throughout the country by the *Serviços de Higiene Rural e Defesa Anti-Sezondtica.* Since 1976, the number of persons arriving from tropical countries has decreased, but vigilance operations will be maintained as long as a possibility, however slight, of malaria reintroduction remains. Appendices contain statistical data. (HC-L)

9229 **Cano Pérez, G., Verduzco Guerrero, E., Turrubiarte Vega, A.** *Tuberculosis en la zona norte del país; predicciones epidemiológicas y estrategias operativas. (Tuberculosis in the northern region of the country; epidemiological predictions and operatives strategies).* Salud Pública de México (Mexico City), 23(2), Mar-Apr 1982, 159-178. Span.

The epidemiology of tuberculosis in Mexico, where it is endemic in the northern part of the country, is discussed with the aid of copious mortality statistics. A control

programme for this area is proposed whose major strategies include the participation and coordination of all health institutions and increased vaccination coverage, especially with BCG. (RMB)

9230 **Carayon, A.** *Réévaluation partielle de la chimiothérapie anti-hansenienne par l'étude des suites éloignées et par les critères expérimentaux et pharmacokinétiques. (Partial reevaluation of anti-leprosy chemotherapy by follow-up and on the basis of experimental and pharmaceutical tests).* Afrique Médicale (Dakar), 19(183), 1980, 573-579. Fren.

This paper reviews the various drugs and regimes used to treat leprosy in francophone Africa today, pointing out some errors to be avoided in their application. It also discusses prevention and treatment of drug-resistant bacilli, treatment of complications of leprosy, and the problem posed by immuno-stimulation. A table showing the various drugs, daily dosage schedules, absorption rates, minimal effective concentrations, rates at which resistance may develop, price, etc., is included. (HC-L)

9231 **Carmichael, T.R., Gibson, I.H., Küstner, H.G.** *Blinding trachoma — a public health challenge.* South African Medical Journal (Cape Town), 61(1), Jan 1982, 5-8. Engl. 11 refs.

Trachoma constitutes a public health problem in several areas of South Africa. After the epidemiology of trachoma is examined, the notifications of trachoma for the past decade are presented and the value of notification of this disease is discussed. Control of blindness due to trachoma may be achieved by involving the community in which it occurs. Statistical data are included. (Modified journal abstract)

9232 **Carmichael, T.R., Gibson, I.H., Küstner, H.G.** *Problems in eradicating poliomyelitis from South Africa.* South African Medical Journal (Cape Town), 59(11), 14 Mar 1981, 374-376. Engl.

The nature of poliomyelitis is to shift from area to area, reappearing, mostly in subclinical form, wherever the number of susceptibles is high enough. The key to its eradication is reduction of the numbers of susceptibles below the critical level for the survival of the virus. This paper presents data on the incidence of notification and pattern of outbreaks of poliomyelitis in South Africa from 1920-1979. Considerable reductions achieved in the last 2 years indicate that eradication of the disease is a possibility in spite of obstacles such as the movement of populations and the instability and/or ineffectiveness of the Sabin vaccine under certain conditions, if continued intensive immunization and the application of a surveillance and containment programme are maintained. (HC-L)

9233 **Carrasco T., R., Fuente H., M. de la** *Vacunas de uso programático en Chile. (Programmed use of vaccines in Chile).* Revista Chilena de Pediatría (Santiago), 52(4), Jul-Aug 1981, 353-356. Span.

A vaccination schedule for children aged 0-12 years, recommended by PAHO for use in Latin America, is outlined. Basic information on storage and handling, dosages, administration, side effects, and contraindications is presented for measles, BCG, poliomyelitis, and DPT vaccines, with special reference to Chile. (RMB)

9234 **Centers for Disease Control, Immunization Practices Advisory Committee, Atlanta, Ga.** *Diphtheria, tetanus, and pertussis; guidelines for vaccine prophylaxis and other preventive measures.* Annals of Internal Medicine (Philadelphia, Pa.), 95(6), 1981, 723-728. Engl. 47 refs.

This article is a revision of the 1977 statement from the Immunization Practices Advisory Committee, Centers for Disease Control, on diphtheria, tetanus, and pertussis. The epidemiology of these diseases, a description of the available immunobiologic preparations, the appropriate immunization schedules, and precautions or contraindications to vaccine use are reviewed. No major changes in immunization policy are recommended for the USA. (Modified journal abstract)

9235 **Chambon, N.** *Antituberculeux. (Anti-tuberculosis drugs).* Développement et Santé (Paris), (40), Aug 1982, 8-13. Fren.

This paper describes methods of administration and possible side effects of the following anti-tuberculosis drugs: isoniazide, rifamycines, ethambutol, streptomycine, dihydrostreptomycine, ethionamide, prothionamide, thiocetazone, paramino-salicylic acid, pyrazinamide, and morphazinamide. The information is summarized in three tables. Important aspects of an anti-tuberculosis treatment are length of drug administration, regular surveillance, and the need to consider two or three drugs to prevent resistance and to reduce the risks of intolerance. (EB)

9236 **Chance, M.L.** *Leishmaniasis.* British Medical Journal (London), 283(6301), 7 Nov 1981, 1245-1248. Engl. 29 refs.

There are an estimated 400 000 new cases of leishmaniasis every year in the world. The aetiologies of the cutaneous and visceral manifestations of the disease are examined and their symptoms described. The antimonials, despite their toxicity, are still the principal means of treatment; where possible, transmission can also be interrupted by pesticide spraying to eliminate the vector. Although an effective vaccine has not yet been developed, advances have been made in the last 15 years in the areas of drug delivery, epidemiology, and laboratory techniques. (DP-E)

9237 **Chen, Z.R., Wei, X.H., Zhu, Z.Y.** *BCG in China.* Chinese Medical Journal (Beijing), 95(6), Jun 1982, 437-442. Engl. 12 refs.

A short review of the history of the development of BCG vaccination in the People's Republic of China since its 1933 introduction is presented. Remarkable progress has been made in the elaboration of BCG theories and clinical practice thanks to extensive research work around the world. Tuberculosis experts and control workers in China also deserve credit for their work in

combatting tuberculosis and cancer. The authors note that widely divergent views exist on the application of BCG against tuberculosis and research continues. Some statistical data are included. (Modified journal abstract)

9238 **Chioma Steady, F.** *Infant feeding in developing countries; combating the multinationals imperative.* Journal of Tropical Pediatrics (London), 27(4), Aug 1981, 215-220. Engl. Refs.
International Peace Research Association Seminar, Vaesterhaninge, Sweden, Jul 1978.

The multinationals imperative is defined as the determination to maximize profits at all costs, even at the cost of human lives. This concept is discussed in the context of the marketing of infant food products in developing countries. In response to criticism of advertisements proclaiming their products as "replacements" for breast milk, weaning food manufacturers have adopted the strategy of proposing these foods as "supplements" to breast-feeding — a tactic the author views as equally dangerous and misleading. Since counter-advertising and nutrition have not been effective in reestablishing breast-feeding, she urges concerned governments to support the production of local weaning foods, to adopt the model breast-feeding programmes of countries such as the People's Republic of China and Cuba, and to take political action. (DP-E)

9239 **Chung, H.L., Ho, L.Y., Tsao, W.C.** *Present situation of filariasis in China.* Chinese Medical Journal (Beijing), 94(9), Sep 1981, 567-584. Engl. 52 refs.
Fifteenth Joint Conference on Parasitic Diseases of the Japan-US Cooperative Medical Science Program, Tsukuba, Japan, 29 Jul-1 Aug 1980.

This extensive review of the present situation of filariasis in the People's Republic of China covers the epidemiology of the disease in each of the 14 provinces where it is endemic; the symptomatology of the disease, both in its acute and chronic stages; the clinical examinations and laboratory methods used in its diagnosis; and the approach taken to its treatment, prevention, and eradication. Hetrazan has been the drug of choice in treating active cases of filariasis for the past 33 years and the various regimens for its application — massive short-term therapy, longer small-dose therapy, intermittant therapy, and mass therapy with table salt mixed with hetrazan — are given. (HC-L)

9240 **Colin, M., Jeanney, J.C., Kanga, J.M., Heroin, P.** *Etude de 200 cas de la maladie de Hansen suivis dans le service de Dermatologie du C.H.U. d'Abidjan de 1975 à 1981. (Study of 200 cases of leprosy followed-up from 1975 to 1981 by Abidjan's C.H.U. dermatology service).* Médecine d'Afrique Noire (Paris), 28(8/9), Aug-Sep 1981, 504. Fren.

Of 400 suspected leprosy cases seen in the C.H.U. dermatology service, Abidjan, Ivory Coast, from 1975-1980, 200 were histologically confirmed. Of these, 37 were classified as indeterminate, 128 as major or minor tuberculoid, and 35 as lepromatous. Due to the lack of extensive diagnostic facilities, this classification was used rather than the more exact Ridly and Jopling classification (1964), but it has proved adequate for all practical purposes. Public knowledge of the disease has improved in recent years and it is noted that most patients are referred by their families or themselves and treated with minimal disruption of their lives or work. (HC-L)

9241 **Coulter, J.B., Hendrickse, R.G., Cutting, W.A., Langmuir, A.D.** *Oral rehydration in diarrhoea.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 74(6), 1980, 827-828. Engl.
See also entry 7854 (volume 12).

The 1st letter contests the statement made in the paper Oral Rehydration in Diarrhoea: Applied Pathophysiology, Cutting and Langmuir (1980) that hypernatraemia dehydration is rare in developing countries and warns against the adoption of a standard preparation of oral rehydration fluid whose sodium content is unacceptably high for hypernatraemic children. The author's reply discusses the problem and concludes by emphasizing the essential message that the earlier children are given fluids to drink, the less important the precise concentration of the solution. Conversely, the younger the infant or the more ill the patient, the more accurately the electrolyte replacement should match the loss. (HC-L)

9242 **Cutting, W.A., Hawkins, P.** *Role of water in relation to diarrhoeal disease.* Journal of Tropical Medicine and Hygiene (London), 85(1), Feb 1982, 31-39. Engl. Refs.

The authors examine the role of water in relation to diarrheal disease in terms of water use and function; water-borne, -washed, -based, and -related diseases; and the association between agent, host, and environment. They note that, in poor socioeconomic situations, improving water supplies is not the easy answer, because diarrhea incidence cannot be reduced without adequate systems of waste disposal, food hygiene, and health education. The use of water in the treatment of diarrhea, i.e. via oral rehydration, is noted. Statistical data are included. (DP-E)

9243 **Darlow, B., Vrbova, H., Stace, J.** *Acute malaria in children in Madang; endemicity, clinical presentation and treatment.* Papua New Guinea Medical Journal (Port Moresby), 24(2), Jun 1981, 85-95. Engl. 43 refs.

In coastal Papua New Guinea, the long-term endemicity of malaria is evident in the number of plants used by traditional healers to treat the disease, although its prevalence among children aged 2-9 years has fallen to about 50% due to health education, treatment, and spraying programmes. The clinical presentation of acute malaria in children is described and its standard treatment discussed, including alternatives to chloroquine/amodiaquine, chloroquine-resistant *falciparum* malaria, and other projects such as new drugs and a diagnostic dipstick. Statistical data and a treatment chart are included. (DP-E)

9244 **Diggory, P.** *Surveillance of foodborne disease in the Caribbean.* Cajanus (Kingston, Jamaica), 14(4), 1981, 181-183. Engl.

In addition to the usual definition of food surveillance, this article mentions seven points that are essential to this activity in the Caribbean context, including the monitoring of international food service operations on airlines and ships, of pesticide ultization, and of the occurrence of fish and shellfish poisoning that may reflect ecological changes. The organization of a food surveillance system is briefly discussed and it is recommended that 1) each country develop its own food safety policy and 2) the PAHO-associated technical committee prepare guidelines for food safety and a regional policy. (DP-E)

9245 **Dirican, M.R.** *Erzurum-Pasinler bölgesinde bebek ve çoçuk Öllümleri. (Infant and child mortality in Erzurum Pasinler town).* Saglik Dergisi (Ankara, Turkey), 54(7-9), 1980, 27-32. Turkish.

In this retrospecive study carried out in 43 villages in Erzurum, Turkey, 750 married women were randomly selected and a questionnaire used to collect information. Results indicated an infant mortality of 254.8:1 000 and a death rate among children aged 0-4 years of 355:1 000. To improve this situation, it is recommended that health education programmes be implemented and that appropriate health manpower training programmes be established to meet the health needs of this country. Closer cooperation among development institutions is also advocated. (Modified journal abstract)

9246 **Dixon, K.E., Roberts, D.R., Llewellyn, C.H.** *Contribuição ao estudo epidemiológico da malária em trecho da rodovia transamazónica, Brasil. (Contributions to the epidemiological study of malaria along the Transamazonian Highway, Brazil).* Revista de Instituto de Medicina Tropical de São Paulo (São Paulo, Brazil), 21(6), 1979, 287-292. Portuguese.

A methodology for estimating the incidence and prevalence of malaria was developed and applied over a 2-year period in a section of the Amazon Basin along the Transamazonian Highway in Brazil. Blood samples from 20% of the resident population were examined at 6-month intervals and mosquito vectors were captured and identified. This paper describes the methodology and its findings and concludes that it is a useful and relatively low-cost tool for malaria surveillance. (HC-L)

9247 **Dupont, A.** *Epidemiological studies in mental retardation: methodology and results.* International Journal of Mental Health (New York), 10(1), 1981, 56-63. Engl. Refs.

This report of a Danish workshop concludes that the methodology of epidemiological studies of mental retardation in developed countries is applicable to only a limited degree in the planning of mental retardation studies in developing countries. Prevalence studies based on screening certain population groups, with consideration of demographic data, may be useful. Certain diagnostic groups, such as chromosomal disorders, may constitute useful sub-groups if the necessary special diagnostic facilities are available. (Modified journal abstract)

9248 **Eckholm, E., Newland, K.** *Health: the family planning factor.* Washington, D.C., Worldwatch Institute, Worldwatch Paper 10, Jan 1977. 30p. Engl. 28 refs.

Uncontrollable fertility poses a number of health hazards, especially to women and children, in developing countries. This paper examines the dangers of early and late maternity and of giving birth to too many children too close together, the legal and health aspects of abortion, contraceptive safety, and the implementation of family planning measures to improve the quality of life. It is suggested that reproductive risks would be minimized if women did not bear children before the age of 18-20 years or after the age of 35 years, births were spaced at least 2 years apart, no woman had more than four children, and people who had completed their families reduced their contraceptive-related risks by choosing sterilization. (DP-E)

9249 **Etzine, S.** *Aspects of ocular disease in southern Africa.* Revue Internationale du Trachome et de Pathologie Oculaire Tropicale et Subtropicale (Annonay, France), 57(4), 1980, 55-58. Engl. Refs.

In South Africa, blindness is most frequently caused by cataracts and glaucoma in adults and as a result of complications from measles in children. No significant difference in the frequency of glaucoma in whites as opposed to blacks has been detected. The severe progression of the disease and the blindness it causes, however, are more frequent in blacks because of an absence of treatment or poor treatment compliance. Epidemics of Rift Valley fever or enzooic hepatitis can result in severe and invalidating macular disorders in exposed persons, while band-shaped keropathy occurs relatively often. Picornavirus-caused haemorrhagic conjunctivitis appeared for the 1st time in South Africa in 1974. (Modified journal abstract)

9250 **Feder, E.** *Deterioration of the food situation in the Third World and the capitalist system.* International Journal of Health Services (Westport, Conn.), 11(2), 1981, 247-262. Engl. 16 refs.

Capital and technology transfers from industrial to non-industrial countries during the 1960s and 1970s have resulted in a number of trends that have made hunger and malnutrition permanent phenomena in the Third World. These include: the concentration of production, processing, and distribution in the hands of foreign agribusiness firms; a shift from labour intensive to capital intensive production, with its accompanying un- and under-employment; a growing orientation of all commodity systems towards exports; and the increased dependency of the developing on the developed countries for staple foods. These interrelated processes are analyzed in this paper and it is concluded that the capitalist system — including the development agencies and, in

particular, the World Bank — is not seriously interested in solving the world food problem. (HC-L)

9251 **Feiz, J., Hafizi, Z.** *Study of the tuberculosis infection rate and presence of atypical mycobacterium infection in schoolchildren in Isfahan, Iran.* Journal of Tropical Pediatrics (London), 26(6), Dec 1980, 223-226. Engl. 12 refs.

A total of 1 393 Iranian schoolchildren from various socioeconomic backgrounds in the city of Isfahan and surrounding villages were skin-tested for tuberculosis infection and the presence of atypical *mycobacterium*. The tuberculosis infection rate was low among children aged 6-7 years (1.6%) but increased with age. Atypical *mycobacterium* infection was associated with low income and poor environmental hygiene rather than age and did induce cross sensitivity in tuberculin testing. Because of the low incidence of tuberculosis in this area, a child-centered case-finding approach to control is recommended over BCG vaccination. In areas where atypical *mycobacteria* have been isolated, using a battery of antigens would be helpful in diagnosing the causative agent. Statistical data are included. (HC-L)

9252 **Fenwick, A., Cheesmond, A.K., Amin, M.A.** *Role of field irrigation canals in the transmission of* Schistosoma mansoni *in the Gezira scheme, Sudan.* Bulletin of the World Health Organization (Geneva), 59(5), 1981, 777-786. Engl.
Also published in French and Russian.

This 1-year study was carried out to determine the importance of small field irrigation canals in the transmission of schistosomiasis in the Sudan. The results indicated that snail populations flourished in only two seasons, when crops of cotton or groundnuts were being irrigated; thus, the presence of temporary dwellings on the canal banks generally coincided with the presence of infected snails. The maximum risk periods were vegetable harvest time (October-December) and cotton picking time (January-April). Possible control measures, including maintenance and use of either focally sprayed or slow-release molluscicides, are discussed. (Modified journal abstract)

9253 **Gebhart, J.A., Cerny, K.** *Symposia o problematice zdravotnictví ve vztahu k rozvojovym zemím. (Symposium on health problems in developing countries).* Prague, Univerzita Karlova, 1981. 248p. Yugoslavian.
Symposia o Problematice Zdravatnictoí ve Uztahu k Rozuajoym Zemím, Liblice, Yugoslavia, 12-14 Oct 1977.
Individual chapters have been abstracted separately under entries 9228, 9287, 9288, 9332, 9488, and 9711.

This collection of papers presented at the 1977 symposium on health problems in developing countries contains 13 presentations written in English. Topics covered include: reintroduction of endemic malaria (Portugal), follow-up of antimony-treated schistosoma mansoni-infected patients (Sweden), controlled malaria in a holendemic region of West Africa, problems of imported malaria (Poland), diseases imported from developing countries (Yugoslavia), imported diseases in the Federal Republic of Germany, problems before and after travelling in the tropics, paragonimiasis in West Africa, work of the cholera reference laboratory (German Democratic Republic), health and diseases in 150 Mon-Khmers in Denmark, amoebiasis (GDR), epidemiological and clinical review of malaria cases (Yugoslavia), and schistosomiasis in Europe. (EB)

9254 **Grzybowski, S.** *Success among the Eskimos.* World Health (Geneva), Jan 1982, 18-21. Engl.
Also published in Arabic, French, Italian, Persian, Portuguese, Russian, and Spanish.

Around 1950, it was estimated that among every 100 Eskimos there were 2 cases of smear-positive tuberculosis, one of whom died, and that 1 out of 4 children became infected by tubercule bacilli yearly. Intensive case-finding and treatment programmes were carried out in Alaska, the Canadian Arctic, and Greenland. Preventive programmes included BCG vaccination and chemoprophylaxis. Modern technology has made it possible to reduce the tuberculosis problem very substantially over a relatively short period (10-20 years). (EB)

9255 **Gunn, R.A., Kimball, A.M., Mathew, P.P., Dutta, S.R., Rifaat, A.H.** *Cholera in Bahrain: epidemiological characteristics of an outbreak.* Bulletin of the World Health Organization (Geneva), 59(1), 1981, 61-66. Engl. 12 refs.

This paper describes the epidemiological and clinical characteristics of an outbreak of 913 culture-confirmed cases of *Vibrio cholerae*, biotype El Tor, serotype Ogawa, that occurred in Bahrain between August 10, 1978-January 23, 1979. Cases were disseminated throughout the country without evidence of clustering; while the highest incidence was in infants, men aged 20-39 years also experienced a high attack rate. A case-control study failed to identify a common vehicle or mode of transmission, but study data indicated that bottle feeding was a significant risk factor for infants and exposure to contaminated food or water outside the home for adult men. Control consisted of surveillance of new cases and contacts and stepped-up community and restaurant sanitation, and the outbreak subsided without the need for stringent border restrictions or mass immunization. (HC-L)

9256 **Harahap, M.** *Leprosy in Indonesia.* Leprosy Review (London), 52(2), 1981, 155-159. Engl.

A leprosy control programme was started in Indonesia in 1956 and gradually extended to the whole country; it is now integrated into the health centre system, where case-finding takes place. A total of 108 817 cases are registered. By reports of the provincial authorities, the prevalence is calculated to range from 7.52:1 000 population in Irian Jaya to about 1:1 000 in 16 of the other 25 provinces. The proportion of lepromatous cases is 33.16% and the male:female ratio 2.3:1. Only 64.13% of cases are having regular treatment. Random population surveys have found many new cases indicating further wide ranges of prevalence, and it is concluded that

the true prevalence is at least 10:1 000. Statistical data are included. (Modified journal abstract)

9257 **Hercberg, S., Rouaud, C.** *Summary: nutritional anaemia.* Children in the Tropics (Paris), (133), 1981, 1-36. Engl.

This special issue on nutritional anaemia defines the disease, discusses its epidemiology, and examines the causes, consequences, treatment, and prevention of anaemias caused by deficiencies of iron, folic acid, and vitamin B12. Other possible causes of nutritional anaemia are considered as is the contribution of nutritional factors to causes of anaemia. Some statistical data are included. (DP-E)

9258 **Huang, C.L.** *Transmission of leprosy in man.* International Journal of Leprosy (Washington, D.C.), 48(3), Sep 1980, 309-318. Engl.

Existing clinical, scientific, and epidemiological knowledge on the mode of transmission of human leprosy is reviewed. It is concluded that much of the published evidence deals with one, or rather few, parameters, whose relationship to the overall scheme of transmission is uncertain. Although it is beyond doubt that most leprosy bacilli emerge from the nose and nasal secretions, probably entering the environment in droplets, little is known of their mode of survival in the environment or their entry into the new host. Existing data certainly do not provide a full model of leprosy transmission and it is suggested that further work attempting to clarify the relative importance of the component events in transmission may have to rely increasingly on epidemiological methods. (Modified journal abstract)

9259 **Iarotski, L.S., Davis, A.** *Schistosomiasis problem in the world: results of a WHO questionnaire survey.* Bulletin of the World Health Organization (Geneva), 59(1), 1981, 115-127. Engl. 27 refs.

On the basis of 103 responses to a questionnaire sent by WHO in 1976, this paper describes the magnitude of the prevalence of schistosomiasis in the world today, summarizes the activities of those countries with national schistosomiasis control programmes (Brazil, Egypt, Iran, Japan, Puerto Rico, St. Lucia, Tunisia, and Venezuela), and discusses the various drugs, molluscicides, and environmental, biological, and other methods of control currently in use. Two maps and eight tables of data are included. (HC-L)

9260 **International Agency for the Prevention of Blindness, Oxford, UK.** *World blindness and its prevention.* Oxford, UK, Oxford University Press, 1980. 93p. Engl.

This collection contains documents from the First General Assembly of the International Agency for the Prevention of Blindness, held in Oxford, UK, from July 6-8, 1978, and previously unpublished WHO reports on the technology and strategy of international actions for the prevention of blindness. Topics covered include the six main causes of blindness, policies and strategies, regional programmes, prevention of blindness, and actions for eliminating avoidable blindness. Appendices list Agency officers and assembly participants. Statistical data are included in many of the papers. (DP-E)

9261 **International Children's Centre, Paris.** *Stimulation in early childhood; a document for academic level workers and professionals.* Paris, International Children's Centre, Dec 1979. 7p. Engl.

This document for academic level workers and professionals deals with stimulation in early childhood and its effect on development. The issue of intervention and its effectiveness is discussed. It is concluded that early stimulation organized by competent professionals can have a limited, but still significant, impact on children from low-income homes. Specifying the extent and the nature of the impact, however, is difficult. The child is part of a family that in turn is part of society; the part of this structure most responsive to intervention remains a mystery. (DP-E)

9262 **International Children's Centre, Paris.** *Immunization: its immunological basis; document for university personnel.* Paris, International Children's Centre, Oct 1979. 9p. Engl.

After examining the two types of cells (macrophages and lymphocytes) involved in the immune response, this technical review discusses immunoglobulin synthesis in the fetus and the newborn. The dynamics of antibody formation are considered as well as immunological adjuvants and antigenic competition. The mode of actions of vaccines is outlined and the suitability of immunization for infants assessed. The final section covers immunization, gamma globulins, and the immune deficiency syndrome. A bibliography and illustrations are appended. (DP-E)

9263 **International Children's Centre, Paris.** *Prevention of accidents in childhood; technical notes for the use of university and other teaching staff.* Paris, International Children's Centre, Sep 1979. 15p. Engl.

Also published in French and Spanish.

This article presents technical notes on childhood accidents for the use of university and other teaching staff. It provides some definitions and examines the main causes of accidents in various age groups. An integrated, multidisciplinary approach to accident prevention is advocated (and illustrated in chart form); the role of health workers is emphasized. Finally, issues in reporting and research are discussed. Statistical data are included. (DP-E)

9264 **International Children's Centre, Paris.** *Prevention of accidents in children between the ages of 3 and 8; technical note for the use of kindergarten and elementary schoolteachers and parents (developed countries).* Paris, International Children's Centre, Sep 1979. 8p. Engl.

Also published in French and Spanish.

This technical note for parents and teachers deals with the prevention of accidents involving children aged 3-8 years. The environment of accidents is discussed, including the people involved and the locale and type of acci-

dent. Rules and regulations have a limited effect on accident prevention; educating children, parents, and teachers is far more important. Some general guidelines and some specific rules are offered as preventive measures at home and in the school. (DP-E)

9265 **International Children's Centre, Paris.** *Immunization strategy; technical note for the use of health personnel working in the field.* Paris, International Children's Centre, Sep 1979. 8p. Engl.
Also published in French and Spanish.
This technical note on immunization is intended for the use of health personnel working in the field. The diseases that are susceptible to immunization are reviewed and the mechanism of action of vaccines described. The proper age for immunization is discussed, as is the procedure for carrying out immunization, including the handling and storage of vaccines and various immunization techniques. Finally, the organization, implementation, and evaluation of immunization programmes are considered. Some statistical data are included. (DP-E)

9266 **International Children's Centre, Paris.** *Stimulation of language and intelligence in young children; document intended for health administrators and planners-family organizations.* Paris, International Children's Centre, Sep 1979. 7p. Engl.
This document, intended for health administrators and family planning personnel, strongly advocates the increased teaching of parent-craft education, largely because young parents often come from small families and have little knowledge of children. Some guidelines are provided to parents for stimulating their preschool children at play; the age at which some specific abilities should be developing are noted. Three situations that present special problems (the working mother, the immigrant family, and the handicapped child) are briefly considered. (DP-E)

9267 **International Children's Centre, Paris.** *Prevention of child accidents at home.* Paris, International Children's Centre, Jun 1979. 11p. Engl.
Also published in French and Spanish.
Accidents are fast becoming the greatest single cause of child death and are a major public health problem in industrialized countries. Tables are presented showing the percentage of deaths caused by accidents and the distribution of accidents by age and cause. Accident prevention requires attention to the child, the human environment, the physical environment, and the agent of the accident. A few suggestions on accident prevention are offered. (DP-E)

9268 **International Children's Centre, Paris.** *Infant stimulation; a review for educators and primary care personnel.* Paris, International Children's Centre, May 1979. 11p. Engl.
Also published in French and Spanish.
This review of infant stimulation is intended for educators and primary care personnel. It looks first at pregnancy, noting that a child's chances for development are greater if it is wanted, if the pregnancy is pleasurable, and if the future mother's living conditions are good. The moment of birth and the period immediately following are also very important. The child's development in the 1st year of life is recounted in terms of sensorimotor ability, language, emotional and mental development, and sociability; this process is continuous and global. The importance of the interaction between mother and child is stressed. (DP-E)

9269 **International Children's Centre, Paris.** *Prevention of children's accidents in the home; material for the guidance of administrators and those responsible for decision-making (developed countries).* Paris, International Children's Centre, Nov 1978. 14p. Engl.
Material for the guidance of administrators and policymakers on the prevention of children's accidents in the home is provided. The reasons for programmes of prevention, the cost of accidents, and the commonest types of accidents are discussed. The elements of an accident (the child, the environment, and the agent) are considered in terms of preventive action and the roles of parents, teachers, and health workers are examined. Finally, the need for research and rules and regulations in this field is noted, as is the search for technological solutions. (DP-E)

9270 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Screening and social integration of handicapped children; a document for mass media specialists.* Paris, International Children's Centre, 1981. 5p. Engl.
Also published in French and Spanish.
This document attempts to identify the activities and services that would most assist the handicapped. Early identification is possible by screening during pregnancy, at birth, and during childhood. Families of handicapped children need information and skills to help their children. The integration of the handicapped into the community is also essential and education aimed at changing attitudes is important. It is suggested that the mass media can be instrumental in helping to change the public's view of the handicapped. (DP-E)

9271 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Child malnutrition: early diagnosis, treatment and prevention; a document for nurses, social workers, teachers.* Paris, International Children's Centre, 1981. 12p. Engl.
Also published in French and Spanish.
This document for nurses, social workers, and teachers defines child malnutrition and lists a number of diseases resulting from nutritional deficiency. The factors contributing to undernutrition and the scope of the problem are discussed, as are the costs to the individual, the family, and society. Suggestions for an integrated approach to undernutrition are presented; school feeding programmes in particular are discussed in some detail. "Planting-to-eating" education programmes are briefly considered and illustrated. (DP-E)

9272 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Child malnutrition: early diagnosis, treatment and prevention; a document for mass media specialists (radio, TV, press).* Paris, International Children's Centre, 1981. 18p. Engl.
Also published in French and Spanish.

This document for mass media specialists on the diagnosis, treatment, and prevention of child malnutrition asserts that, with the sincere efforts of individuals and governments, hunger can be eliminated. The media can help by making people aware of the problem and by providing nutrition education. A number of facts about malnutrition that can be conveyed through the media are presented, as well as statistical data on the subject. The cost of malnutrition is considered and the most vulnerable groups and the best approaches to them are discussed. Some attention is also given to the problem of obesity. (DP-E)

9273 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Screening and social integration of handicapped children; a document for academic level workers and professionals.* Paris, International Children's Centre, 1980. 8p. Engl. 13 refs.
Also published in French and Spanish.

Medical screening of total populations can be used to obtain epidemiological measurements that help to assess prevalence and distribution of specific disorders or as a clinical tool to identify preventable conditions. It is essential, however, that the screening be for a disease for which treatment is available and that the test be simple, reliable, and cost-efficient, for only then can this practitioner-initiated procedure be justified. The role of screening in relation to handicapped children and the integration of these children into society is discussed. (DP-E)

9274 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Screening and social integration of handicapped children; a document for nurses, midwives, social workers, teachers and parents.* Paris, International Children's Centre, 1980. 4p. Engl. 9 refs.
Also published in French and Spanish.

There are adequate screening instruments and diagnostic techniques available to make early identification of potentially handicapping conditions possible; this permits early intervention and correction of potential problems. The family is essential in helping to both identify deviations in their children's development and implement corrective programmes. The socialization of handicapped children is vital to the children, their parents, and society. One technique for achieving this is "mainstreaming", described in this article. Also included are definitions of handicapping conditions and a screening check list that can easily be used by parents. (Modified journal abstract)

9275 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Screening and social integration of handicapped children; a document for policymakers.* Paris, International Children's Centre, 1980. 6p. Engl. 10 refs.
Also published in French and Spanish.

This article on handicapped children briefly describes the magnitude of the problem; the classification of impairments; early detection; screening techniques; preventive measures; the integration of the handicapped child into the family, the school, and the community; and the child's rehabilitation. It is noted that the problem is different in kind and in magnitude from country to country and especially between the developed and developing worlds; consequently, the approach to the problem will vary with locale. (DP-E)

9276 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Infant nurseries and day care; a document for mass media specialists.* Paris, International Children's Centre, 1980. 6p. Engl.
Also published in French and Spanish.

This document, intended for mass media specialists, considers the social changes that have been instrumental in the increasing use of day care for children. The characteristics of day care centres and in-home placement are discussed in terms of the important criteria (health, ideology, cost, and child development) for day care. Alternatives to conventional day care, usually involving cooperation between families, are briefly examined. Finally, the role of the mass media in this field, mainly to encourage discussion and debate, is mentioned. (DP-E)

9277 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Infant nurseries and day care; a document for academic level workers and professionals.* Paris, International Children's Centre, 1980. 17p. Engl.
Also published in French and Spanish.

This article, intended for academic level workers and professionals, discusses infant nurseries and day care from the points of view of the four parties involved: the parents, the child, the substitute parent, and the community. It also describes the various ways in which day care can be organized and considers the advantages and disadvantages of each. Finally, a number of research issues in this area are discussed. It is concluded that the use of day care may or may not be a good solution; the quality of care offered and the way in which the parents deal with the situation must be considered. (DP-E)

9278 **International Children's Centre, Programme on the Development of Information on Early Childhood, Paris.** *Infant nurseries and day care; a document for nurses, midwives, social workers, teachers and parents.* Paris, International Children's Centre, 1980. 11p. Engl.
Also published in French and Spanish.

Throughout the world, a growing number of couples with

young children are both leaving the home each day to work outside. This article, intended for nurses, midwives, social workers, teachers, and parents, discusses the available choices in child care. While facilities are increasing, it is not always possible to find a solution that meets the needs of the parents and the child. It is important to choose the right age to entrust the child to outside care and to do so gradually. The pitfalls of leaving a child with a relative or with an untrained, unqualified person are discussed. Different types of day care centres are briefly described and some representative statistical data are included. (DP-E)

9279 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Infant nurseries and day care; a document for policy-makers.* Paris, International Children's Centre, 1980. 12p. Engl.
Also published in French and Spanish.

This document for policy-makers defines day care and explores the reasons for its rising importance. A review of various attempts to solve the problems of child care is presented. The two methods of child care most common today, day care centres and home placement, are compared in terms of their effect on the child's development, health, and socialization. The high cost of good child care is considered. It is noted that a "profit" can be realized when health and intellectual development are taken into account. Finally, the basis for establishing child care programmes is discussed. Some representative statistical data are included and several innovative programmes described. (DP-E)

9280 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Child abuse and neglect; a document for mass media specialists.* Paris, International Children's Centre, 1980. 8p. Engl.
Also published in French and Spanish.

This document, intended for mass media specialists, recounts the principles of the United Nations Declaration on the Rights of the Child pertaining to child abuse, a broad area that includes physical or sexual abuse, emotional maltreatment, and neglect. It is important to define child abuse; otherwise, it is impossible to learn the extent of this world-wide problem. The causes of child abuse must be discussed and steps taken to prevent it. The role of the media in investigating and publicizing the problem is outlined. Some representative statistical data are included. (DP-E)

9281 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Child abuse and neglect; a document for academic level workers and professionals.* Paris, International Children's Centre, 1980. 15p. Engl. 8 refs.
Also published in French and Spanish.

This document for academic level workers and professionals defines child abuse, briefly considers its recent history and epidemiology, and outlines some of the problems in the area of reporting and registration, chiefly the lack of uniformity. The clinical and social evidence most often seen are described. Management of the problems is discussed at some length in terms of prevention, prediction, family resources, legal issues, personnel (both lay and professional) and their training, and the role of the community. (DP-E)

9282 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Child abuse and neglect; a document for nurses, midwives, social workers, teachers and parents.* Paris, International Children's Centre, 1980. 10p. Engl.
Also published in French and Spanish.

This document for nurses, midwives, social workers, teachers, and parents defines child abuse and warns of the difficulties involved in arriving at an accurate definition. Child abuse appears to be on the increase in developing countries, perhaps because there are more surviving children and health workers are more aware of it. Clinical evidence is reviewed with a distinction between traumatic and non-traumatic pathology. The children, parents, and circumstances most often involved in instances of abuse are described. Measures for dealing with child abuse and for preventing it are considered in some detail. (DP-E)

9283 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Child abuse and neglect; a document for policy-makers.* Paris, International Children's Centre, 1980. 11p. Engl.
Also published in French and Spanish.

This document deals with issues of child abuse and neglect that are most important to policy-makers, including definition, symptoms, scope and incidence, cause and effect, reporting, and programmes of treatment and prevention and the policies that promote them. A checklist (in chart form) of physical and behavioural indicators of abuse is provided as are lists of characteristics of abusive and neglectful parents and a sample reporting form. (DP-E)

9284 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Child malnutrition: early diagnosis, treatment and prevention; a document for physicians, professionals, university level personnel.* Paris, International Children's Centre, 1980. 12p. Engl.
Also published in French and Spanish.

This document for physicians, professionals, and university personnel on child malnutrition deals with both undernutrition and overnutrition but concentrates on the former. In particular, the causes and the very serious consequences of early undernutrition, a major problem in many developing countries, are explored. Early detection is crucial; the most important tool here may be anthropometric measurements. The prevention of undernutrition through education and nutrition programmes is discussed, as is its treatment. Overnutrition is briefly examined in terms of the magnitude of the

problem and of the prevention and treatment of obesity. (DP-E)

9285 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Immunization; a document for mass media specialists.* Paris, International Children's Centre, Dec 1979. 8p. Engl.
Also published in French and Spanish.
This document for mass media specialists provides some illustrative information on diseases that can be prevented by immunization and a table showing vaccination schedules for various parts of the world. The reasons for continued child deaths from preventable diseases are considered and the role of the media in providing information and in asking questions on behalf of parents is discussed. The importance of clear, simple, and accurate reporting of facts by the media is stressed. (DP-E)

9286 International Children's Centre, Programme on the Development of Information on Early Childhood, Paris. *Infant stimulation.* Paris, International Children's Centre, Dec 1979. 9p. Engl.
If a woman is relaxed, well-nourished, and well-prepared during pregnancy, her improved state of well-being can positively influence that of the fetus. The moment of birth is also crucial. The 1st year of a child's life is perhaps the most important; this is the main topic of this pamphlet. An infant needs love and stimulation in order to develop. In some circumstances, social and educational interventions can help to fulfill some of these requirements. Development of traditionally-reared African babies and Western babies is compared; some statistical data on infant mortality are included. (DP-E)

9287 Januszkiewicz, J., Dziubinski, K., Szczepanski, M. *Some practical problems of imported malaria.* In Gebhart, J.A., Cerny, K., eds., Symposia o Problematice Zdravotnictvi ve Vztahu k Rozvojovym Zemin, Prague, Univerzita Karlova, 1981, 140-146. Engl.
For complete document see entry 9253.
In the years 1973-1976, 62 cases of imported malaria were reported in Poland. This paper presents data on the source of infection, the agent of infection, and the age, sex, and national distribution of the patients and sets the probable incidence of the disease at 10 times that reported, i.e., 150-200 cases annually. Given the fact that only 25% of the malaria victims had carried out proper chemical prophylaxis during and after their stay in a malarious area, that over 90% of Polish doctors have never seen a case of malaria, and that only a few laboratories are accustomed to identifying malaria parasites, the need for outpatient departments for tropical diseases such as the one at the Institute of Infectious and Parasitic Diseases, Medical Academy, Warsaw, is evident. (HC-L)

9288 Kecmanovic, M., Kostic, A., Suvakovic, V., Jevtic, M. *Diseases imported from developing countries and treated in the clinic for infectious diseases in Belgrade.* In Gebhart, J.A., Cerny, K., eds., Symposia o Problematice Zdravotnictvi ve Vztahu k Rozvojovym Zemin, Prague, Univerzita Karlova, 1981, 151-155. Engl.
For complete document see entry 9253.
This paper presents data on the incidence and treatment of imported cases of the following tropical diseases detected in Yugoslavia in the years 1961-1976: filariasis, schistosomiasis, hookworm, strongyloidiasis, fasciolopsiasis, leishmaniasis, Marburg disease, and cholera. Since most of these were detected during systematic examination of foreign students, it is suggested that all Yugoslavs and foreigners coming from tropical countries be subjected by law to examination by a team specializing in tropical medicine. (HC-L)

9289 Khadim, M.I. *Oral manifestations of malnutrition; I: the effect of vitamins.* Journal of the Pakistan Medical Association (Karachi), 31(2), Feb 1981, 44-48. Engl. Refs.
The tissues of the mouth often show earlier signs of nutritional disturbances than other parts of the body and are easily examined. This article describes, and illustrates with citations from the literature, the oral symptoms of deficiencies of thiamine; riboflavin; pyridoxine; folic, nicotinic, ascorbic, and pantothenic acids; cyanocobalamin; alpha-tocolpherol; and vitamins A, D, and K. The symptoms of excessive amounts of the last three are also presented. (DP-E)

9290 Kimati, V.P., Loretu, K., Munube, G.M., Kimboi, F. *Problems of measles virus response with reference to vaccine viability, age, protein energy malnutrition and malaria in the tropics.* Journal of Tropical Pediatrics (London), 27(4), Aug 1981, 205-209. Engl. 37 refs.
The most effective schedule for immunization against measles in tropical countries is still disputed. This paper considers the problems and presents some new results from Tanzania, gained under the careful conditions of a research project, rather than as a routine field programme. Since seroconversion was about 45%-50% at age 6 months (compared to 74%-100% at age 8 months), the authors conclude that vaccination programmes starting at age 6 months are too wasteful and therefore recommend starting immunization at age 8-9 months. They also caution that under field conditions, where vaccine stability is more important and likely to be doubtful, results will be less good. Statistical data are included. (Modified journal abstract)

9291 Krishna Das, K.V. *Nutritional anaemias in India.* Journal of the Association of Physicians of India (Bombay, India), 28(12), Dec 1980, 521-533. Engl. 62 refs.
Nutritional anaemias, particularly iron-deficiency anaemia, are among the most widespread maladies in India, leading to severe reduction in productivity and a heavy drain on the curative health services. This paper reviews available data on the magnitude of the problem among the general population and specific groups (especially pregnant women); discusses the diagnosis, treatment, and prevention of the condition; and explores the role

of aggravating factors (e.g., helminthic infestations) in the aetiology of the disease. Research efforts should focus on simple methods such as the effect of deworming versus food supplementation, the introduction of iron cooking utensils, health education, and the training of local health teams in anaemia management. (HC-L)

9292 **Kumar, S., Paul, R.C., Rao, C.K., Sharma, M.I.** *Guinea worm disease in India — current status and strategy of its eradication.* Journal of Communicable Diseases (New Delhi), 13(1), 1981, 1-7. Engl.

As a preliminary to attempting eradication of guinea worm disease in India, attempts have been made to define the affected areas. Infections have been found in 7 533 villages in seven states, with a total population of just under 6 million people at risk. The government strategy for eradication of the disease is outlined. Statistical data are included. (Modified journal abstract)

9293 **Küstner, H.G., Gibson, I.H., Carmichael, T.R., van Zyl, L., Chouler, C.A.** *Spread of cholera in South Africa.* South African Medical Journal (Cape Town), 60(3), Jul 1981, 87-90. Engl. 11 refs.

The current cholera epidemic in South Africa began in October 1980 and is part of the 7th pandemic. Initial investigation of the epidemic revealed a virtually closed system of water supply, which explained the distribution of the early cases. The spread of cholera is examined and local factors contributing to cholera transmission are discussed. Attempts are being made to prevent cholera from becoming endemic and long-term improvements in health facilities in the susceptible areas of the country are being undertaken. (Modified journal abstract)

9294 **Landman, J., Jackson, A.A.** *Role of protein deficiency in the aetiology of kwashiorkor.* West Indian Medical Journal (Kingston, Jamaica), 29(4), 1980, 229-238. Engl. 66 refs.

This paper reviews the literature from Jamaica and elsewhere for evidence that kwashiorkor is primarily due to caloric and not protein deficiency and that the varied clinical signs of the disease are actually due to complex nutrient imbalances and deficiency patterns rather than a single cause. It is concluded that the protein-rich foods hitherto developed and used for nutrition rehabilitation are costly and wasteful sources of energy and have had little effect on the basic problem. Aggressive treatment of all infections and the repletion of all specific nutrient deficiencies are recommended as the 1st step in the successful treatment of kwashiorkor. (HC-L)

9295 **Laosombat, V., Dharmasakti, S.** *Neonatal malaria in southern Thailand.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 12(1), Mar 1981, 99-103. Engl. Refs.

Six cases of neonatal malaria in southern Thailand are described, five due to *Plasmodium vivax* and one due to *P. falciparum*. Three of the mothers had malaria during pregnancy but two had negative blood films when their babies were diagnosed. Transmission could have occurred in three ways: congenitally (before birth), during parturition by damage to the placenta, and after birth by mosquito bite. In all the children, the malaria was diagnosed 16-26 days after birth and the incubation period of vivax malaria can be as short as 10 days. (Modified journal abstract)

9296 **Larouze, B.** *Nouvel antibilharzien, le praziquantel (Biltricide R). (Praziquantel (Biltricide R), a new drug against bilharzia)* Médecine d'Afrique Noire (Paris), 28(1), Jan 1981, 13-15. Fren.

This paper briefly summarizes research findings and clinical trials of praziquantel in the treatment of schistosomiasis. In a single dose of 40 mg:kg body weight, praziquantel has been shown to cure approximately 80% of schistosomiasis sufferers without serious side effects. It is presently being tested on a mass scale in Egypt as part of a pilot project aimed at discovering the most appropriate combination of preventive and therapeutic measures for eliminating the disease from an endemic area. (HC-L)

9297 **Lindtjorn, B.** *Clinical features of rabies in man.* Tropical Doctor (London), 12(1), Jan 1982, 9-12. Engl. 8 refs.

By means of case histories from two Ethiopian hospitals, the symptoms of dumb rabies, a form of the disease difficult to diagnose, are illustrated. While few patients with dumb rabies display the aggressive behaviour characteristic of hydrophobia, symptoms often include paralysis, anxiety, and hyperaesthesia of the scar site. Proper diagnostic technique and the differences between the two forms are discussed. (DP-E)

9298 **Lloyd, S.** *Progress in immunization against parasitic helminths.* Parasitology (London), 83(1), 1981, 225-242. Engl. 110 refs.

Recent developments in the production of vaccines against parasitic helminths are examined. These include immunization with irradiation-attenuated helminths, with helminth extracts, and with *in-vitro*-produced metabolites; the isolation and characterization of functional antigens; non-specific immunization; heterologous immunization; and oral immunization. The author concludes that the production of new vaccines is a viable possibility. (DP-E)

9299 **Mamvura, C.B.** *1981 the year of the handicapped.* Central African Journal of Medicine, 27(11), Nov 1981, 226-228. Engl.

A June-October 1980 survey of 250 handicapped children in Salisbury, Zimbabwe, indicated that 84.4% (211) of their disabilities were preventable; of these, 46.8% were due to problems at birth, 6.8% to poliomyelitis, and 7.6% to convulsions. Reasons for these high figures are analyzed and some problems associated with caring for disabled children (e.g., incontinence, chest infections, psychological and nutritional disturbances) considered. Possible options for treating these children are presented. (DP-E)

9300 **Marinkelle, C.J.** *Control of leishmaniases.* Bulletin of the World Health Organization (Geneva), 58(6), 1980, 807-818. Engl.
Also published in French and Spanish.
This paper reviews the various kinds, clinical manifestations, and geographic distribution of leishmaniasis throughout the world. Because of the pervasiveness of the vector sandfly and the variety of animal reservoirs involved, control measures can only be effective where they have been carefully tailored to the local epidemiology; up-to-date information on the disease is thus crucial to its control. Some approaches to control under different circumstances are recommended. (HC-L)

9301 **Mata, L.J.** *Child malnutrition and deprivation — observations in Guatemala and Costa Rica.* Food and Nutrition (Rome), 6(2), 1980, 7-14. Engl. 10 refs.
Based on his observations in Guatemala and Costa Rica, the author postulates that the pattern of malnutrition changes in magnitude and aetiology with the character of society. The extent of malnutrition is greatest in the traditional society, where underdevelopment (the synergism of malnutrition and infection) accounts for the bulk of it. In the transitional society, underdevelopment is still its leading cause with social pathology (neglect and abuse) a close 2nd. In the modern society, where malnutrition is least prevalent, social pathology followed by organic malfunction are its main causes. The implications of this model for social and nutritional interventions are discussed. (HC-L)

9302 **McMahon, J.E.** *Note on drug trials in schistosomiasis.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 75(4), 1981, 597-598. Engl.
Based on the results of two tests of praziquantel carried out in the Tanga region of Tanzania, it is concluded that, in schistosomiasis, if the subjects of drug trials are in contact with potentially contaminated water, then differences in the chemotherapeutic response to the same dose of a drug given in the same endemic area in different seasons may be related to different levels of transmission. Because a reduction in egg excretion may occur from causes other than chemotherapy, moderate antischistosomal activity of a drug cannot be concluded in the absence of a control group. (Modified journal abstract)

9303 **Merdol, T.O.** *Nutritional traditions in Turkey (with reference to education needs).* Journal of Tropical Pediatrics (London), 27(6), Dec 1981, 273-278. Engl. 24 refs.
After reviewing the traditional diet in different areas of Turkey, the author examines the processing and storage of these foodstuffs. Infant feeding is discussed, largely in terms of the alternatives available to women who cannot breast-feed, which is considered by far the healthiest situation for infants. The effects of the socioeconomic differences between the inhabitants of cities and rural villages are also assessed. Two approaches to nutrition education are suggested: one geared to helping people adapt to the prevailing social conditions, which are considered unalterable, and a second that incorporates nutrition education into a whole gamut of development programmes aimed at social changes. (DP-E)

9304 **Michon, J.** *Tuberculose: mieux la comprendre pour mieux l'éradiquer. (Tuberculosis: the better understood, the quicker eradicated).* Développement et Santé (Paris), (40), Aug 1982, 2-7. Fren.
Tuberculosis continues to be a major health problem in Third World countries with an estimated 10 million new cases reported yearly. This paper looks at the physiopathological and epidemiological aspects and ways of controlling the disease. The treatment methodology and drug administration are described with illustrations. (EB)

9305 **Millan, J.J.** *Dépistage de la lèpre dans un secteur de la Guadeloupe (French West Indies); organisation et analyse des résultats obtenus de 1973 à 1978. (Detection of leprosy in a district of Guadeloupe (French West Indies); organization and evaluation 1973-1978).* Médecine Tropicale (Marseilles, France), 40(2), Mar-Apr 1980, 161-168. Fren.
This report evaluates data collected from 1973-1978 concerning the incidence of leprosy in a district of Guadeloupe, with an aim to establishing a surveillance strategy. Methods of active and passive detection are described and the 275 cases are tabulated according to origin and distribution of types. There appeared to be an almost constant number of infectious patients, with active detection being the only effective leprosy prevention method. The need for integration of this specialized detection service into the general structure of Guadeloupe's health services is discussed. The paper concludes with a number of suggestions regarding continued control of leprosy transmission. (EB)

9306 **Mossop, R.T.** *Recognition and treatment of early sexually transmitted disease.* Central African Journal of Medicine, 26(1), Jan 1980, 8-12. Engl.
Symptoms, particularly different types of genital sores, characterizing the common venereal diseases are discussed with a view to proper diagnosis and a number of diagnostic techniques and treatments considered. It is suggested that efforts be made to trace and carefully examine contacts. Note should be taken of the clinical findings in these contacts and whatever laboratory aid is available should be mustered in support of proper treatment and clearer definition. It is only in this way that clinicians can make a contribution to the elimination of these diseases. (Modified journal abstract)

9307 **National Academy of Sciences, Institute of Medicine, Division of International Health, Washington, D.C.** *Pharmaceuticals for developing countries; conference proceedings.* Washington, D.C., National Academy of Sciences, 1979. 432p. Engl. Refs.

Conference on Pharmaceuticals for Developing Countries, Washington, D.C., 29-31 Jan 1979.

These proceedings contain the conference addresses and remarks, lists of members and contributors, and the texts of papers grouped into these general subject areas: major disease problems of developing countries -- the current status of preventive, prophylactic, diagnostic, and therapeutic agents; current programmes for the development of pharmaceuticals; international health from the perspective of the Carter administration; problems and constraints; research opportunities; international health policy initiatives; strengthening incentives and overcoming obstacles; and the role of public and private initiatives in US international health policy. Many papers contain statistical data. (RMB)

9308 **Ong, C.N., Phoon, W.O.** *Development of and recent trends in occupational health in Singapore.* Annals of the Academy of Medicine of Singapore (Singapore), 11(3), Jul 1982, 401-410. Engl.

The rapid progress in awareness, personnel, services, education, and research in the area of occupational health in Singapore in the past 10-15 years is described. The role of Singapore as a regional centre for education, consultancy service, and research is increasing; the development of various institutions and organizations is discussed. Evidence suggests that common occupational diseases such as metal poisoning, dermatitis, deafness, and psychological disturbances are largely unreported. About 150 research papers on the subject have been published in Singapore and the discipline is becoming ever more important. Some statistical data are included. (Modified journal abstract)

9309 **Oyediran, M.A.** *Maternal and child health and family planning in Nigeria.* Public Health (London), 95(6), Jun 1981, 344-346. Engl. 9 refs.

A short description is given of plans for the future development of maternal and child health and family planning services in Nigeria. At present there is a major inequality in terms of health facilities and trained health care staff between urban and rural areas. The proposed basic health scheme, which will rely on a tier system, has as its objectives the adoption of a health care system better suited to local conditions; the nation-wide standardization of health services organization, administration, and management; and the training of new cadres of health personnel. (DP-E)

9310 **Pacheco, C.R., Olvera, R., Herrera, M.** *Panorama epidemiológico y control de la tuberculosis en la República Mexicana. (Review of the epidemiology and control of tuberculosis in the Mexican Republic).* Salud Pública de México (Mexico City), 22(3), May-Jun 1980, 251-259. Span.

A review of statistical data on tuberculosis in Mexico from 1966-1978 reveals that it is endemic and has shown no tendency to decline over the last 4 years. By the end of 1978, there were 50 659 registered tuberculosis patients in the country, 24 382 of them discovered that year. This paper presents and discusses 12 tables of data on tuberculosis morbidity, mortality, incidence, and prevalence and outlines the current approach to disease control in Mexico, with emphasis on the short-course chemotherapy programme introduced in 1979. (HC-L)

9311 **Pan American Health Organization, Washington, D.C.** *Review of mortality and morbidity in the English-speaking Caribbean, 1970-1980.* Epidemiological Bulletin (Washington, D.C.), 2(3), 1981, 1-5. Engl.

Morbidity and mortality data for the years 1970, 1974, and 1978 from Antigua, Barbados, Dominica, St. Lucia, and St. Vincent (total population 0.6 million) are reviewed and discussed. It is noted that although the ratio of infectious:degenerative diseases is shifting in favour of the latter, mortality from infectious diseases continues to be high, especially in young children. Deaths from nutritional deficiencies have declined sharply, but those attributed to accidents have risen. The lack of reliable information makes it very difficult to plan health programmes, and efforts to improve the collection and analysis of morbidity and mortality data are strongly recommended. (HC-L)

9312 **Pan American Health Organization, Washington, D.C.** *Diarrheal disease in the Americas.* Epidemiological Bulletin (Washington, D.C.), 1(2), 1980, 1-4. Engl.

Diarrheal diseases constitute a major health problem among children in Latin America and the Caribbean. PAHO is therefore encouraging and assisting these countries in the establishment of national diarrheal disease control programmes with a view to reducing diarrhea-related infant and young child mortality through oral rehydration provided as part of the primary health care activities. This paper presents national statistics on mortality from diarrhea, outlines the programme's strategies, and points out specific areas in which PAHO support to participating countries is available. (HC-L)

9313 **Pinto Dias, J.C., Borges Dias, R.** *Housing and the control of vectors of human Chagas' disease in the state of Minas Gerais, Brazil.* Bulletin of the Pan American Health Organization (Washington, D.C.), 16(2), 1982, 117-129. Engl. 29 refs. Also published in *Boletín de la Oficina Sanitaria Panamericana*, 93(5), 1982.

The Brazilian government's strategy for combatting Chagas' disease is directed primarily at controlling house infestations by applying insecticides and improving the houses; villagers, however, are often not receptive to such innovations. Efforts in the state of Minas Gerais seem to have heightened awareness of the problem and, in one case, led to action by one village without government intervention or support. Experience to date suggests that control of the disease may ultimately depend upon gradual evolution and modification of rural society, involving the resolution of an array of complex and difficult problems. Some statistical data are included. (Modified journal abstract)

9314 **Piredda, A., Foschi, R.** *Recenti acquisizioni in tema di scabbia. (Recent development on the subject of scabies).* Chronica Dermatiologia (Rome), 8(5), 1977, 617-634. Ital. Refs.

Some recently published works on scabies in a variety of languages are briefly reviewed, with emphasis on the prevalence of this parasitic infection in Italy. The works are analyzed in three subject areas: clinical, histological, microscopic, and therapeutic aspects; immunology; and epidemiology. (RMB)

9315 **Rahman, S.** *Proceedings of the Conference on Experimental Cholera Vaccines.* Dhaka, Bangladesh, International Centre for Diarrhoeal Disease Research, 1981. 155p. Engl.
Conference on Experimental Cholera Vaccines, Dhaka, Bangladesh, 6-8 Apr 1981.

The purpose of this conference was to review the current state of knowledge relevant to cholera vaccine and to define directions for further work that may bring an effective vaccine to field testing in a careful and systematic way. Part 1 presents a conference report, conclusions, and recommendations, list of participants, and the agenda. Part 2 contains seven papers concerned with review of current knowledge and 14 working papers reporting on specific experimental vaccines. The participants identified as a difficulty to further development the absence of a recognized standard of potency. The need for an animal model, in which bacteria must colonize an intact intestine, was noted. Statistical data are included. (EB)

9316 **Ratnam, S.S., Karim, S.M., Ng, C.S., Tamby-Raja, R.L., Tsakok, F.H.** *Research and development in obstetrics and gynaecology in the Department of Obstetrics and Gynaecology at the National University of Singapore.* Annals of the Academy of Medicine of Singapore (Singapore), 11(3), Jul 1982, 313-321. Engl.

The research and achievements of the Department of Obstetrics and Gynaecology, National University of Singapore, are reviewed. Research activities include birth control, subfertility, reproductive endocrinology, in-vitro fertilization, trophoblastic disease, prostaglandins, and perinatal medicine. The Department publishes from 40-60 articles annually (a list of 1980 publications is included). Facilities are excellent and the quality of patient care is high. (DP-E)

9317 **Rau, P.** *Nutrition education for school children.* Nutrition (Hyderabad, India), (14), 1980, 2-7. Engl.

Suggestions for promoting good eating habits among schoolchildren in India are presented. The author examines the food habits of schoolchildren, stresses the need for a balanced diet in this age group, and outlines the roles of parents and teachers in nutrition education. Teachers can oversee school meal programmes and garden projects, incorporate nutrition education into the study of other subjects, and use a variety of interesting visual aids. (DP-E)

9318 **Reutlinger, S.** *Determining the prevalence of calorie-deficient diets in developing countries by alternative methods of measurement.* Food and Nutrition Bulletin (Tokyo), 2(4), 1980, 15-20. Engl.

The main advantages of using calorie-deficiency indicators to assess the extent of malnutrition in large population groups are that, on a national scale, food consumption data are easier to come by than are nutritional health data and that calorie-deficiency data immediately suggest kinds and magnitudes of interventions. This paper discusses refinements in the formulae for calculating calorie-deficiency indicators and presents a formula that takes into consideration variations in intakes and requirements among individuals in each sub-group. (HC-L)

9319 **Rosenfield, P.L., Widstrand, C.G., Ruderman, A.P.** *Social and economic research in the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.* Social Science and Medicine (Aberdeen, UK), 15A(5), Sep 1981, 529-538. Engl. 28 refs.

The need to improve the design and application of tropical disease control measures has led to the establishment of a Social and Economic Research Scientific Working Group in the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. This group will support research to increase the effectiveness of disease control activities and to improve the bases for research resource allocation decisions. Specific projects will be sought to identify human attitudes and behaviour affecting disease transmission, to analyze social and economic factors of disease causation, to estimate costs and effectiveness of disease control measures, and based on these prior studies, to develop management strategies for disease control programmes. (Modified journal abstract)

9320 **Rubis, P., Seng, C.H., Jute, N.A., Jau, J.L.** *Parasitological and entomological studies on filariasis in seven villages, Serian district, Sarawak, East Malaysia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 12(1), Mar 1981, 30-36. Engl.

An average of 16 cases of clinical filariasis have been seen annually for the past 5 years in health facilities in Serian district, Sarawak, Malaysia. This paper presents the methodology and results of an epidemiological study of brugian filariasis in seven villages in Serian district. The study involved the examination of blood specimens from all inhabitants aged more than 1 year, observation of the periodicity of the parasite in two heavily infested individuals, and capture and dissection of mosquito vectors. The overall infestation rate was low (5.1% with a range of 0-10.7%) but is considered the lowest possible indication of the problem in the area. Given the current pool of human infections and the known vectors, it is concluded that filariasis will continue to pose a serious public health problem if it is not contained in time. (HC-L)

9321 **Sabin, E., Stinson, W.** *Primary health care issues: immunizations.* Washington, D.C., American Public Health Association, International Health Programs, Series 1, No. 2, Oct 1981. 43 p. Engl.

Various issues involved in integrating vaccination programmes into primary care are examined. Separate chapters cover vaccine-preventable diseases and immunization, vaccine delivery and the cold chain, strategy and costs of immunization delivery, integrated services and community participation, programme management, and management information and evaluation. Appendices include a bibliography and notes on research and resources in immunization delivery. (DP-E)

9322 **Savoia, D.** *Problemi attuali nel campo delle parassitosi e delle malattie tropicali. (Current problems of parasitoses and tropical diseases).* Giornale di Batteriologia, Virologia ed Immunologia (Turin, Italy), 70(1/2), Jul-Dec 1977, 239-248. Ital. Refs.

Findings of the WHO-supported special research programme about tropical diseases are reported in this article. The reports of the different biological and medical research projects concerning leprosy, malaria, leishmaniasis, trypanosomiasis, schistosomiasis, and filariasis are discussed in their immunological, chemotherapeutic, social, and economic aspects. Some statistical data are included. (Modified journal abstract)

9323 **Scharlau, G.** *Onchocerciasis — chemotherapy: a risk-approach.* Tropical Doctor (London), 11(1), Jan 1981, 8-14. Engl. Refs.

Because both available drugs for treating onchocerciasis can produce severe side effects, the author provides a frame for the option of treatment or not, weighing the risks of infection against the risks of treatment, and subdividing patients into two groups: those already showing severe clinical manifestations, usually in the form of eye lesions, and those at high risk to develop such manifestations. Indications for treatment in the 2nd group are discussed. The author suggests that disease control strategy be based on conversion of heavy infections to light ones, using small periodic and total dosages, rather than complete suppression of the infection. (DP-E)

9324 **Sekarajasekaran, I.A.** *Physical changes of the environment and health effects with special reference to water pollution and sanitation in Malaysia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 10(4), Dec 1979, 634-649. Engl.

The process of modernization in Malaysia has greatly affected the health of the environment, adding to the problems already posed by population growth and inadequate sanitary facilities those resulting from agricultural expansion and practices, industrialization programmes, and urbanization trends. These include: severe siltation of rivers; leaching of nitrogen and phosphorous compounds into surface waters; pollution from pesticides, weed-killers, and industrial effluents; destruction of food supply (fish) by toxic wastes; and an increase in the diseases of modern living — occupational illnesses, mental illnesses, and accidents. These problems are discussed individually and backed up with 10 tables of statistical data and government approaches to improving environmental health are briefly examined. (HC-L)

9325 **Shann, F., Gerusz, S.** *Childhood pneumonia at Goroka Hospital.* Papua New Guinea Medical Journal (Port Moresby), 22(4), Dec 1979, 72-75. Engl. 16 refs.

A retrospective study of pneumonia undertaken at the Pediatric Ward, Goroka Hospital, Papua New Guinea, revealed that, in comparison with survivors, children dying from pneumonia were more likely to suffer from malnutrition, anaemia, and leucocytosis and to have been ill longer and given more antibiotics prior to admission. The results of the study underline the need for more precise knowledge regarding the aetiology and antibiotic sensitivity of pneumonia in Goroka children as the basis for establishing rational routine antibiotic therapy and, possibly, vaccination against pneumonia. Such a study, using lung aspiration, is currently underway. (HC-L)

9326 **Sharp, P.T., Harvey, P.** *Malaria and growth stunting in young children of the highlands of Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 23(3), Sep 1980, 132-140. Engl. 16 refs.

The relationship between malaria and the growth of young children was studied in the Sau River Valley of Enga Province, Papua New Guinea, where malaria is endemic. At low altitudes, malaria is a contributing factor to stunting in young children. The effect is most marked in children aged less than 2 years and may result from retarded intrauterine growth, although malaria may also inhibit growth in young chidren. In the absence of a malaria control programme, distribution of amodiaquine and chloroquine could reduce mortality and ill health and enhance the nutritional well-being of young children; regular maternal child health clinics could be useful distribution sites. Statistical data are included. (Modified journal abstract)

9327 **Shor-Piusker, V.** *Medicina perinatal, implicaciones médico-sociales; 3: condición socioeconómica y evolución perinatal. (Medicosocial implications of perinatal medicine; 3: socioeconomic status and perinatal outcome).* Gaceta Médica de México (Mexico City), 115(4), Apr 1979, 166-171. Span. 12 refs.

See also entries 9129 and 9154.

Studies published in many countries have demonstrated a simple and direct correlation between socioeconomic status and birth weight and perinatal mortality. More about the role of the various elements of socioeconomic status (income, education, occupation, marital status, living conditions, grand multiparity, access to antenatal care, etc.) and the mechanisms of their interaction in the aetiology of low birth weight and perinatal mortality needs to be known before social and medical priorities can be set and appropriate interventions designed. This

paper discusses available literature on the subject from the USA, the UK, and Mexico. (HC-L)

9328 **Somerville, P.C., Notelovitz, J., Alberts, M.** *Typhoid fever in the northern Transvaal national states; an approach to an epidemiological quandary.* South African Medical Journal (Cape Town), 60(13), 25 Sep 1981, 491-495. Engl. 14 refs.

The serious nature of the high incidence rate of typhoid fever in the northern Transvaal (South Africa) national states is discussed. It is recommended that epidemic areas be chosen as models to identify modes of transmission from carriers and other sources. In the endemic areas this approach is considered to be of limited value owing to geographical and social conditions. Education of the populace in basic hygiene, followed by improvement in the health services and vaccination programmes, is recommended as suitable for reducing the incidence of the disease until potable water supplies and sewage disposal facilities can be provided. Statistical data are included. (Modified journal abstract)

9329 **Spracklen, F.H., Flanagan, S., Ascott-Evans, B.H.** *Malaria in Cape Town; a report of 3 cases and a review of current therapy and prophylaxis.* South African Medical Journal (Cape Town), 60(8), 22 Aug 1981, 307-312. Engl. 16 refs.

Three cases of malaria seen with 1 week at the Somerset Hospital in Cape Town (South Africa) are reported. One of these patients developed cerebral malaria and severe brain damage. The management of acute malaria and its complications, as well as the prophylaxis, is briefly reviewed. In view of the difficulty in obtaining intravenous quinine in Cape Town, it is strongly recommended that small supplies of the drug be maintained at centres throughout the country. This may decrease the incidence of cerebral malaria, the potentially fatal complication of *Plasmodium falciparum* infections. (Modified journal abstract)

9330 **Stott, H.** *How treatment has evolved.* World Health (Geneva), Jan 1982, 24-28. Engl.
Also published in Arabic, French, Italian, Persian, Portuguese, Russian, and Spanish.

This article traces developments in the treatment of tuberculosis from the earliest methods of bleeding and purging to the present short-course rifampicin regimens. Treatment included injection with a gold compound called "sanocrysin" in the mid-1920s and administration of new drugs, namely streptomycin (1945), P-aminosalicylic acid (1946), and isoniazid (1952). While, with the introduction of chemotherapy in the late 1940s, operative intervention became less frequent and patients could be treated at home, supervision by medical personnel of daily self-administration of drugs for long periods became difficult. Today's ambulatory care and intermittent and short-course treatments have proven to be especially beneficial in Third World countries. (EB)

9331 **Sutnick, A.I., Saunders, J.F., Puchkov, Y.I.** *Cancer control in India: a multinational approach involving the USA and the USSR.* American Journal of Public Health (New York), 72(7), Jul 1982, 714-717. Engl. 10 refs.

WHO invited a collaborative team of consultants from the USA and the USSR (countries that have long cooperated with each other in medicine and public health) to recommend a cancer control programme for the government of India. The team defined the importance of cancer of the cervix and of the oral cavity as the basis for a programme. Specific recommendations in education, prevention, early detection, diagnosis, treatment, and epidemiologic studies were made. This mission underscores the value of multinational cooperation and serves as a basis for international friendship and understanding in the context of mutually productive activities that provide a benefit for all nations. (Modified journal abstract)

9332 **Suvakovic, V., Kostic, A., Kecmanovic, M., Jevtic, M.** *Epidemiological and clinical review of malaria cases registered in Yugoslavia from 1960 till 1976.* In Gebhart, J.A., Cerny, K., eds., Symposia o Problematice Zdravotnictvi ve Vztahu k Rozvojovym Zemin, Prague, Univerzita Karlova, 1981, 229-237. Engl.
For complete document see entry 9253.

Interruption of the transmission of malaria in Yugoslavia was achieved in 1964. Since then, 13-42 cases per year have been registered, most of them imported but a few induced by blood transfusion. The fact that *Plasmodium falciparum*, the most malignant form of human plasmodium, is on the rise and has been responsible for four deaths in recent years underlines the need to make physicians more aware of the existence of the disease so that early detection and treatment, including intensive antishock treatment and the parenteral administration of antimalarials, can be implemented. (HC-L)

9333 **Suzuki, T., Sudomo, M., Bang, Y.H., Liat, L.B.** *Studies on Malayan filariasis in Bengkulu (Sumatera), Indonesia with special reference to vector confirmation.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 12(1), Mar 1981, 47-54. Engl. 19 refs.

A joint WHO/ministry of health study of brugian filariasis was carried out in Bengkulu province, Indonesia, where the infection rate in humans was 25%. The purpose of the study was to elucidate the transmission dynamics of filariasis with a view to finding effective and feasible control methods. This paper presents the methodology and results of the part of the study dealing with identification of the principal mosquito vectors of the disease with microfilaria surveys of people and domestic cats. (HC-L)

9334 **Ten Dam, H.G., Hitze, K.L.** *Determining the prevalence of tuberculosis infection in populations with non-specific tuberculin sensitivity.* Bulletin of the World Health Organization (Geneva), 58(3), 1980, 475-483. Engl. 26 refs.

In tropical countries, where there is generally a high prevalence of non-specific sensitivity, the tuberculin test is inadequate for detecting tuberculosis infection. A method is proposed by which the prevalence of infection in the population can be determined under such circumstances, thus making possible meaningful epidemiological surveillance of the disease. This method compares levels of tuberculin sensitivity in individuals before and after BCG vaccination. If BCG vaccination fails to produce an increase in tuberculin sensitivity, the individual must have been infected with human or bovine tubercle bacilli. Statistical data are included. (Modified journal abstract)

9335 **Ten Dam, H.G., Hitze, K.L.** *Does B.C.G. vaccination protect the newborn and young infants?* Bulletin of the World Health Organization (Geneva), 58(1), 1980, 37-41. Engl.

In recent years, BCG vaccination has been applied to the newborn in many immunization programmes at the time of the changeover from mass vaccination to an integrated programme. Whereas the efficacy of BCG vaccination in adolescents and adults has been studied in a number of controlled trials, there is very little direct evidence of the efficacy of BCG vaccination against infant tuberculosis. This article reviews the evidence that is available concerning vaccination of the newborn from both controlled trials and retrospective studies. Further controlled prospective studies and epidemiological surveillance of BCG vaccination in infancy are highly indicated. (Journal abstract)

9336 **Van Mazijk, J., Pinheiro, F.P., Black, F.L.** *Measles and measles vaccine in isolated Amerindian tribes; I: the 1971 Trio (Tiriyo) epidemic.* Tropical and Geographical Medicine (Haarlem, Netherlands), 34(1), Mar 1982, 3-6. Engl. Refs.

In 1971, an epidemic of measles occurred in two villages in an isolated Indian territory on the Brazil-Surinam border. The attack rate was 80% in one village (population 416) and the death rate 4.2%. In the other village (population 283), the attack rate was 11.7% and there was one death. This paper describes the epidemic and its antecedents (previous epidemics and mass vaccination campaigns) and examines the relationship between the attack rate:mortality and vaccination and/or immune status. (HC-L)

9337 **Warren, K.S.** *Bench and the bush in tropical medicine.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(6), Nov 1981, 1149-1158. Engl. 37 refs.
Forty-sixth Annual Charles Franklin Craig Lecture, Atlanta, Georgia, 5 Nov 1980.

The author — a multidisciplinary biomedical scientist with 25 years experience in schistosomiasis research — describes how clinical and epidemiological studies carried out in Brazil, St. Lucia, Kenya, Egypt, the Philippines, and the People's Republic of China (the 'bush') and studies on the pathogenesis of schistosomiasis in animal models and test tubes at research institutes in Bethesda, London, and Cleveland (the 'bench') resulted in the development of what may well be the most specific and sensitive immunodiagnostic test now available for any helminth infection, a radioimmunoassay using a purified antigen. (HC-L)

9338 **Waterlow, J.C.** *Observations on the suckling's dilemma: a personal view.* Journal of Human Nutrition (London), 35(2), 1981, 85-98. Engl. Refs.

The author maintains that traditional weaning habits, such as the age at which supplementary foods are introduced, may have been established for valid reasons and that it may be dangerous to interfere with them without more knowledge about the aetiology of malnutrition and immunology. For example, since the evidence suggests that the peak prevalence of diarrhea coincides with the introduction of solid foods, possibly due to their contamination or that of the environment, there may be advantages in introducing them early, while the breast-feeding infant is still receiving passive immunity from the mother's milk. Aspects such as diet, physiology, and infection must therefore be more carefully investigated before making general recommendations concerning infant feeding policies. (DP-E)

9339 **Weekly Epidemiological Record, Geneva.** *Cholera in 1980/Choléra en 1980.* Weekly Epidemiological Record (Geneva), 56(13), 3 Apr 1981, 97-98. Engl., Fren.

This paper presents the number of cholera cases reported to WHO by region and country in 1980 and compares the global figure to those for the years 1975-1979. WHO believes that the best way to prevent and control cholera is through a programme aimed at the control of all diarrheal diseases and guidelines for doing so may be obtained by writing to: The Programme Manager, Programme for Control of Diarrheal Diseases, World Health Organization, 1211 Geneva 27, Switzerland. (HC-L)

9340 **Weiss, N.** *Filariasis.* Acta Tropica (Basel, Switzerland), 38(3), Sep 1981, 195-362 Engl. Refs.

In this special issue, the editor has attempted to lay out on-going research activities on filariasis by presenting a collection of 18 original papers, three of which are reports of field work and the rest, experimental laboratory work. The 1st paper, entitled "Issues in Filariasis — a Century of Enquiry and a Century of Failure", discusses the prerequisites to an effective disease control programme. (HC-L)

9341 **Wernsdorfer, W.H., Kouznetsov, R.L.** *Paludisme pharmacorésistant — apparition, lutte et surveillance. (Drug-resistant malaria: appearance, control and surveillance).* Bulletin of the World Health Organization (Geneva), 58(4), 1980, 559-571. Fren. 10 refs.
Originally published in English in *Bulletin de l'Organisation mondiale de la Santé, 58(3), 1980, 341-352.*

The occurrence of chloroquine-resistant strains of *Plasmodium falciparum* throughout the world has had

serious implications for the treatment and control of malaria. Although alternative drugs exist, they are more expensive than chloroquine, more complicated to administer, and unsuited to mass treatment. This paper reviews the nature, causes, and extent of chloroquine-resistant strains of *P. falciparum* and examines alternative treatments and approaches to control that must be taken in areas where drug-resistant malaria does or is likely to occur. Methods of testing for drug sensitivity and the WHO world-wide surveillance programme are also discussed. (HC-L)

9342 **WHO, Geneva.** *Epilepsy in developing countries.* WHO Chronicle (Geneva), 33(5), 1979, 183-186. Engl.

Also published in French, Russian, and Spanish.

There is evidence to suggest that epilepsy is more prevalent in developing than in developed countries, probably as a result of correspondingly high rates of prematurity, birth injuries, childhood febrile convulsions, malnutrition, and infections (including multiple parasitism). Based on the report of a WHO study group, this paper reviews recent advances in the diagnosis and treatment of epilepsy, identifies seven compounds considered essential for a national epilepsy control programme, and discusses the social aspects of epilepsy (public attitude toward, legislation governing epileptics, etc.) with special reference to the developing countries. (HC-L)

9343 **WHO, Geneva.** *Social and health aspects of sexually transmitted diseases; principles of control measures.* Geneva, WHO, WHO Public Health Papers, No. 65, 1977. 56p. Engl.

This monograph discusses the factors involved in the world-wide recrudescence of sexually transmitted diseases and their cost to society. It then examines the kind of health structures, legislation, diagnostic facilities, methods of treatment and prevention, and health education needed for their control. Areas where further research is required and some suggestions for improving present approaches to control are put forward. (HC-L)

9344 **Winick, M.** *Malnutrition and a young child's mind.* Cajanus (Kingston, Jamaica), 14(2), 1981, 79-83. Engl.

It is now a well-established fact that malnutrition during the 1st year of life can retard normal development. Studies conducted during the 1970s have, however, demonstrated that proper psychological stimulation provided during or shortly after the period of malnutrition can reverse this trend. This paper is a brief review of research culminating in the discovery that malnutrition is generally reversible if the child grows up in an enriched environment. (Modified journal abstract)

9345 **Woodall, J.P.** *Summary of a symposium on yellow fever.* Journal of Infectious Diseases (New Delhi), 144(1), Jul 1981, 87-91. Engl.

Symposium on Yellow Fever, Belem, Brazil, 18-22 Apr 1980.

The aims of this symposium on yellow fever were to review epidemiologic events, to discuss progress in research, and to identify areas for future basic and field research and for action by the Pan American Health Organization. This article examines the yellow fever virus, its epidemiology, vector biology and control, vaccine production and quality, and the risk of urban spread. (DP-E)

III Health Care Implementation

III.1 Inpatient Care

See also: 9200, 9216, 9484.

9346 **Cannon, J.** *Public hospital in Peshawar.* Australian Nurses Journal (Port Adelaide, Australia), 11(8), Mar 1982, 20-21. Engl.

A free-lance journalist briefly relates her perceptions of the quality of patient care in a public hospital in Peshawar, Pakistan — a facility serving not only the local tribes but also Afghan rebels and refugees. Conditions during her visit were aggravated by a doctors' strike and by the fact that the nurses, although still on duty, were prohibited by law from prescribing medicines. (DP-E)

9347 **Daud, S., Tufail, M., Ashfaq, A.** *Tetanus neonatorum; a preliminary report on the assessment of different therapeutic regimens.* Journal of the Pakistan Medical Association (Karachi), 31(5), May 1981, 105-108. Engl. Refs.

A prospective study is being carried out in the Department of Child Health, Khyber Medical College, Peshawar, to assess various conservative methods in the treatment of neonatal tetanus. Out of 100 cases studied over a period of 1 year, mortality was 48%. A substantial reduction in mortality was observed by adding pyridoxine to conservative measures. The main complications encountered during the course of therapy were aspiration pneumonia, jaundice, and septicaemia. The survivors examined in the follow-up clinic were found to be developmentally normal but 80% of them had umbilical hernias. Statistical data are included. (Modified journal abstract)

9348 **Holloway, A.M.** *Anaesthesia at King Edward VIII Hospital, Durban, South Africa.* Anaesthesia (London), 36(7), Jul 1981, 704-708. Engl.

Anaesthetic practices at the King Edward VIII Hospital, Durban, South Africa, a 2 099-bed referral hospital serving a predominantly Zulu population, are described. Most of the surgery performed there is emergency surgery resulting from trauma and the anaesthetic techniques used are essentially those of the UK. Equipment and training programmes are discussed and special emphasis is given to the cultural characteristics of both patients and staff. (DP-E)

9349 **Lee, S.T.** *Two decades of specialized burns care in Singapore, 1961-1982.* Annals of the Academy of Medicine of Singapore (Singapore), 11(3), Jul 1982, 358-365. Engl.

After reviewing the history of the 20-year-old burns unit of the Singapore General Hospital, the author lists the (strictly adhered to) criteria for admission and provides information on numbers of patients treated, age and sex distribution, causes of burns, and incidents of mass burn casualties. The development of treatment techniques and some current practices are considered and mortality and morbidity figures for 1973-1981 given. Finally, current research and future plans are discussed. Statistical data are included. (DP-E)

9350 **Okoaji, P.A.** *University of Benin Teaching Hospital, Benin City, Nigeria.* Radiography (London), 47(558), Jun 1981, 138-140. Engl.

A radiologist employed there briefly describes the foundation and facilities of the University of Benin Teaching Hospital, Benin, Nigeria, with emphasis on the X-ray department. The hospital aims to provide: a full range of hospital and specialist services to the community; training facilities for physicians, nurses, midwives, and paramedicals; and facilities for medical services. (DP-E)

9351 **Sroczynski, Z.** *Anaesthesia in Banjul, the Gambia.* Anaesthesia (London), 36(7), Jul 1981, 709-711. Engl.

A Danish anaesthesist describes his 1-year experience serving in the Royal Victoria Hospital, Banjul, the Gambia. Due to a lack of trained physicians, anaesthesia services are provided by seven nurses whose special functions are unfortunately not recognized by the national health service. The nurses's training, equipment, facilities, agents and techniques, the recovery room, and morbidity and mortality are considered. Suggestions for strengthening the anaesthesia services are given. (DP-E)

9352 **Werner, D.** *Primary health care and the temptation of excellence.* Newsletter from the Sierra Madre (Sierra Madre), (10), Apr 1975, 1-35. Engl.

Unpublished document.

The main part of this newsletter briefly reviews the history of the Ajoya Clinic — an effort begun by some US volunteers to bring basic health care and preventive medicine to the villagers in the mountainous area of Sinaloa, Mexico, in 1965. It also recounts, at greater length, the clinic's experience in training village health workers, adopting appropriate technology, and coming to a better understanding of human needs versus medical

technology. The last two pages contain informative notes on Project Piaxtla's activities and needs. (HC-L)

9353 **Wiswedel, K.** *Combined local-spinal anaesthesia in rural obstetric practice.* Tropical Doctor (London), 12(1), Jan 1982, 7-8. Engl.
A technique of combining local and spinal anaesthesia for Caesarean section is described, together with the necessary modifications in the surgical procedure. Analysis of 165 Caesarean sections performed in a South African hospital using this technique revealed no maternal deaths, two fetal deaths, one prolapsed cord, and one detached placenta, indicating a higher degree of safety for both mother and child. It is recommended as an alternative to general anaesthesia in rural hospitals where a trained anaesthesist may not be available. (DP-E)

III.2 Outpatient Care

See also: 9179, 9352, 9520.

9354 **Bucher, E.H., Schofield, C.J.** *Economic assault on Chagas disease.* New Scientist (London), 92(1277), 29 Oct 1981, 321-324. Engl.
The aetiology of Chagas' disease and its invasion of the area of Argentina known as the Chaco are described. Since poor management and over-exploitation, which impoverished the soil and interrupted natural cycles of production, helped to spread the disease, a scheme promoting good land management and improved living standards was developed by Carlos Saravia Toledo to combat both poverty and trypanosomiasis. As a result of this project, the formerly scattered rural population has been concentrated around self-supporting rural industries so that health care and spraying activities can be carried out more easily; the transmission of the disease has been interrupted and living conditions are much improved. (DP-E)

9355 **Fournier, G.** *Médecine et les soins de santé primaires. (Physician and primary health care).* Médecine Tropicale (Marseilles, France), 41(4), Jul-Aug 1981, 363-372. Fren. 15 refs.
This paper describes a primary health care scheme that is being implemented in Maradi, Niger, with special emphasis on the role of the health professionals, the village health workers, and the community itself in the quest for health. Although the scheme has not been formally evaluated, it is estimated that the training of 7-10 village health teams has doubled the output of one rural dispensary at very low cost; it has also inspired the nurse staffing the dispensary to take a more active role in public health. (HC-L)

9356 **Fritsch, M.** *Probleme der Rehabilitation im Ausland; APAE — ein Früherfassungs- und Behandlungszentrum für Kinder in Joinville/Santa Catarina/Brasilien. (Problems of rehabilitation abroad; APAE — an early recognition and treatment centre for children in Joinville, Santa Catarina, Brazil).* Rehabilitation (Stuttgart, Germany FR), 20(4), Nov 1981, 179-180. German.
Established by parents and friends of the handicapped in the poverty-stricken region of Santa Catarina in northeastern Brazil, APAE is a day care centre providing medical and therapeutic treatment to 150 mentally and physically handicapped infants and children to age 12 years. The staff consists of 13 professionals, including 5 doctors, and 25 teachers. In the treatment of children aged 0-7 years, mothers are included and instructed on how to continue therapy programmes at home. For children aged 7-12 years emphasis is on physiotherapy and self-help training. All children receive one protein-rich meal per day and the mothers are taught about basic hygiene and nutrition. Other areas examined by the author include: lack of sufficient and appropriate devices for the diabled, e.g. wheelchairs; the inability of these children to attend regular schools due to lack of qualified instructors; the tendency of the consequently uneducated, unemployed youth to form criminal gangs; and the integration of APAE-taught children into family and society. (EB)

9357 **Gresham, Smith and Partners, Nashville, Tenn. Spann/Hall/Ritchie, Architects, Dothan, Ala.** *Pediatric medical center helps to overcome the problems of inadequate health care delivery in a rural area.* Hospitals (Chicago, Ill.), 56(4), 16 Feb 1982, 118-119. Engl.
This article tells how a pediatric medical centre build in 1980 in rural Alabama (USA) has helped to overcome the problems of inadequate health care delivery in a poor area. Located adjacent to a modern hospital, the well-equipped facility emphasizes primary care and preventive medicine. Unusual architectural features and their purposes are described. Plans for the expansion of the centre and for the establishment of similar centres in other areas are briefly outlined. (DP-E)

9358 **Kan, G.Q.** *Tuberculosis and its control in Beijing.* Chinese Medical Journal (Beijing), 94(10), Oct 1981, 685-690. Engl.
From 1949-1979, mortality from tuberculosis in metropolitan Beijing, the People's Republic of China, dropped from 230:100 000-10:100 000 and the prevalence declined from 600:10 000-3.6:10 000. This paper presents 10 tables of data on the epidemiology of tuberculosis during the period and describes the evolution of the disease control programme. Today, it consists of BCG vaccination of all newborns, revaccination of non-reactors among 1st graders in primary schools (age 7) and middle schools (age 13), and outpatient treatment with a standard regimen of chemotherapy. Examination of symptomatic individuals seeking medical care is gradually replacing mass chest X-ray as the main case-finding method. (HC-L)

9359 **Krahl, W., Quek, S.L., Raman, N.** *Community child and adolescent guidance clinic in Malaysia.* Medical Journal of Malaysia (Singapore), 36(3), Sep 1981, 171-173. Engl.
The Child and Adolescent Guidance Clinic, Ipoh, Ma-

laysia was started in May 1979. It is staffed and operated by the largest mental hospital in the country (Bahagia) and takes referrals from hospitals, general practitioners, schools, and social welfare officers. This paper reports on the 1st 40 patients seen in the clinic (their diagnosis, socioeconomic background, ethnic distribution, etc.), describes the therapeutic approach taken in the clinic, and briefly discusses some of the problems that have been encountered so far. (HC-L)

9360 **Simmonds, S.P., Walker, G.J.** *Essential drugs for primary health care standard packages.* Lancet (London), I(8269), Feb 1982, 435-436. Engl. 13 refs.

Continuing provision of essential drug supplies is crucial to the successful deployment of primary health workers and, in this regard, a method of estimating the range and quantity of a limited number of drugs that will be required by a given population during a given period is of value. This paper describes and illustrates such a method with reference to the needs of a population of 10 000 in a developing country over a 3-month period. It is pointed out, of course, that the particular listing and quantities will vary according to such factors as the age structure of the population, the local disease pattern, the diagnostic capability of the primary health care workers, and the national prescribing policies. (HC-L)

III.3 Mobile Units and Services

9361 **Onyia, D.N., Sanda, O.** *Mobile under-fives clinic in Ekpoma, Nigeria.* Tropical Doctor (London), 11(3), Jul 1981, 128-131. Engl.
Annual Conference of the Nigerian Medical Association, Ilorin, Nigeria, Apr 1980.

The activities of mobile under-fives clinics in Ekpoma, Bendel State, Nigeria, from October 1979-March 1980 are evaluated and the results discussed and presented as statistical data. They indicate that most diseases could be prevented through health education, immunization, malarial chemoprophylaxis, and regular monitoring of weight. Mobile clinics could fill this need in rural areas where fixed clinic facilities are absent or inadequate. Other suggestions and recommendations, including the deployment and training of auxiliary health workers to carry out routine consultations and treatment, are presented. (Modified journal abstract)

9362 **Roberts, S.** *"Flying samaritan" to Mexico's rural poor.* American Journal of Nursing (New York), 81(9), Sep 1981, 1694, 1696. Engl.

The activities of the Flying Samaritans, a group of California (USA) volunteer doctors, nurses, dentists, pilots, and technicians who spend weekends bringing health services to free clinics they have established for rural Mexican families, are described by a nursing participant. While supplies and equipment are donated, the participants pay their own expenses but feel more than compensated by the satisfaction of providing vitally needed medical and nursing care. (DP-E)

9363 **Weekly Epidemiological Record, Geneva.** *Communicable disease surveillance; portable laboratory kit for rapid diagnosis of infectious diseases/ Surveillance des maladies transmissibles; nécessaire de laboratoire portatif pour le diagnostic rapide des maladies infectieuses.* Weekly Epidemiological Record (Geneva), 56(23), 1981, 181. Engl., Fren.

A portable laboratory kit has been designed and field-tested by the US Naval Health Research Centre in San Diego, California. The kit includes a compact McArthur microscope, slides, and stains; all the instruments and reagents required to perform counterimmunoelectrophoresis (CIE) and coagglutination tests (COAG); a compact incubator-water bath; transformers and inverters to permit operation on either 110- or 220-volt mains current or a 12-volt car battery; an alcohol burner; bacteriological loops; and tubes of selective enrichment broth. With the inclusion of suitable reagents, the 13-kg kit has the potential for diagnosing histoplasmosis, amoebiasis, malaria, serum hepatitis, myoglobinaemia, and other diseases by CIE; to allow toxin detection and antibody titration, also by CIE; and to identify *Entamoeba coli* enterotoxin, *Mycobacterium*, *Neisseria gonorrhea*, and *Shigella* by COAG. (HC-L)

III.4 Health Education

See also: 9158, 9165, 9170, 9317, 9394, 9441, 9448, 9460, 9467, 9535.

9364 **Arthur, M.L.** *Health by the year 2000 — health education and the community nurse.* Curationis (Pretoria, South Africa), 4(3), Dec 1981, 10-12. Engl.

This essay looks at the challenge and scope of health education and the community nurse's important role in persuading individuals and families to adopt and sustain health practices. In order to affect behaviour change, a sound understanding of the community setting is required on the part of the field worker. Ways of planning, developing, and conducting health education programmes are discussed and several opportunities often neglected in the process are pointed out. Health education activities should reach persons of all age-groups and concentrate not only on curative aspects but also on promotive and preventive services. (EB)

9365 **Consumer's Association of Penang, Malaysia.** *Wake up before you make up.* Penang, Malaysia, Consumer's Association of Penang, 1982. 4p. Engl.
The series is published in Malay, Chinese, and Tamil.

This brochure from the series of consumer education pamphlets produced by the Consumer's Association of Penang describes the dangers of common cosmetics such as antiperspirants, deodorants, cleansing lotions, moisturizers, soaps, shampoos, and lipsticks and reveals the results of tests carried out on 20 popular brands, almost all of which contained high levels of either lead, chromi-

um, cadmium, or ameranth. Other pamphlets in the series cover healthy cooking methods, salt, hygiene, talcum powder, and chemicals in food, with subseries of three items on cigarette smoking and six on breastfeeding. A complete set with folder can be ordered for US$2.00. (RMB)

9366 **Courtejoie, J., Mbizi, M., Lelo di Kimbi Kiaku, N.M.** *Rapport d'activité du Centre pour la Promotion de la Santé, 1979. (Activity report of the centre for health promotion, 1979).* Kangu-Mayumbe, Zaïre, Centre pour la Promotion de la Santé, 1979. 17p. Fren.

See volumes 4 and 5 for manuals and brochures.

The *Centre pour la Promotion de la Santé*, Kangu-Mayumbe, Zaire, in keeping with its name and objectives, has produced a series of manuals, brochures, and teaching aids on various aspects of health for teachers, nurses, and auxiliary health workers. It also trains auxiliaries known as health animators to disseminate health knowledge via the "multiplier effect" and participates in conferences, workshops, etc., seeking support and contributing to an exchange of ideas at the international level. This booklet summarizes the activities of the centre's team during the year 1979. (HC-L)

9367 **D'Agostino, M., Raimbault, A.M.** *Nutrition education of pre-school age children.* Children in the Tropics (Paris), (128), 1980, 5-14. Engl.

The 1st part of this paper presents a methodology for developing nutritional education programmes for preschool children in developing countries. It discusses three ways in which nutritional education can be achieved: by integrating it into such activities as language, games, and sensory excercises; by teaching children elementary food hygiene and environmental hygiene rules; and by evaluating nutrition education by having educators and children conduct height and weight measuring and observation sessions. The 2nd part of the paper reports on an experiment carried out in two nursery schools near Paris where nutrition education initiative was combined with active campaigning. The children were supplied with free milk products and were taught the origins, processing, and uses of such products. (EB)

9368 **de Lauture, H., Wone, I., Coste, M., Araujo, G. de** *Stratégie mise en oeuvre dans une action de soins de santé primaires au Sénégal oriental. (Strategy put into effect in the activities of primary health care services in eastern Senegal).* Dakar Médicale (Dakar), 27(1), 1982, 19-28. Fren.

In order to find solutions to the majority of health problems by involving the properly trained and controlled population itself, a campaign in the New Territories region of eastern Senegal was undertaken from April 1976-June 1978. Being a newly settled, medically underserved zone with a precarious health situation and high infant mortality, the area was considered ideal for the project, which evolved in four phases, each one specifically canvassing the population: presenting the project to the people, training community health officials, extending the original campaign, and continuing and maintaining participation. This article discusses the strategies put into effect and the training of the primary health care workers, stressing the importance of real dialogue with the people. (EB)

9369 **Drucker, D.** *Integration of health education in the 'CARE' Water and Sanitation Project in Indonesia.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report No. 39, Apr 1982. 32p. Engl.

If the public health objectives of the CARE Water and Sanitation Project in Indonesia are to be fully realized, it is essential that a social component accompany the hardware component of the project. This report addresses the basic issues and problems involved in introducing a health education/social participation component into the project; sets forward a number of approaches for doing so; and identifie a number of national and international sources of skills and materials for such an endeavour. It is recommended that 2%-3% of the project budget be set aside for community-oriented activities and that selected field officers be trained to train others to promote and generate support for the proper installation, use, and maintenance of water supply and sanitation facilities. The need for a clearinghouse for educational materials is pointed out. (HC-L)

9370 **Fitzgerald, T.** *Teaching good food habits by the game approach.* Food and Nutrition Notes and Reviews (Canberra, Australia), 33(1), 1978, 11-13. Engl.

An American anthropologist describes a 'game' approach to teaching children about nutrition. This method enables the teacher to determine which foods the children prefer, which ones they consider most healthful, and which ones they most often receive at home. One of the great advantages of this approach is that pictures can replace words and an inability or hesitancy to verbalize will not hinder the learning process. This approach is also useful simply as a research tool. (DP-E)

9371 **Gibson, D.** *Income of one's own.* World Health (Geneva), Dec 1981, 18-21. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Beginning in 1978, the Women's Bureau of Sri Lanka and the Lanka Mahila Samili (a group of women's organizations) joined forces to instruct rural women in a combined programme of family health and income-generating activities. The latter include poultry-raising, rope-making, flower-growing, and home gardening. The money earned from these activities can then be used to improve standards of family health in the ways recommended during a training course in communicable diseases, nutrition, environmental health, child care, and first aid. The programme has recently been expanded to include slum women. (DP-E)

9372 **Hardy, E.E., Vichi, A.M., Sarmento, R.C., Moreira, L.E., Bosqueiro, C.M.** *Breastfeeding promotion: effect of an educational program in*

Brazil. Studies in Family Planning (New York), 13(3), Mar 1982, 79-86. Engl. 11 refs.

By means of slide and tape presentations and group discussions, 200 low-income mothers from Campinas, Brazil, were taught about breast-feeding, nutrition, and child care by maternity staff of the State University of Campinas Hospital from November 1978-June 1979. When compared to a matched control group of women who delivered at a local maternity unit offering no health education, a significantly larger proportion of women in the experimental group was fully breast-feeding at each month during a 9-month follow-up study. The study findings are discussed and presented as statistical data. (DP-E)

9373 Harland, P.S. *"Mother-Power" in the treatment of infant diarrhoea.* Cajanus (Kingston, Jamaica), 14(3), 1981, 144-151. Engl.

After a brief description of hospital use of oral rehydration to treat children with diarrhea in Jamaica and Costa Rica, the alternative of teaching mothers to prepare oral rehydration solutions from locally available ingredients is considered. Some problems involved with this practice include conflicting recipes obtained from different sources and the difficulties of measuring accurately, but this is still considered the best way of dealing with the situation, provided that there is proper supervision, until local production of WHO/UNICEF oral rehydration packets can be implemented. (DP-E)

9374 International Children's Centre, Paris. *Health habits; a learning experience.* Children in the Tropics (Paris), (128), 1980, 3-29. Engl.

A variety of health education activities aimed at children aged less than 6 years are described. These include nutrition education and accident prevention. The former should emphasize good nutrition, the consumption of local products, and hygiene, while the latter analyzes risk factors, ways to limit risks, and learning good safety habits. Advice on teaching methods and aids is included. (DP-E)

9375 Jayasinha, R.T. *Community health knowledge among senior school students in the University Community Health Project area — Kotte, Sri Lanka.* Royal Society of Health Journal (London), 101(5), 1981, 214-215. Engl. 8 refs.

The health knowledge of 460 secondary school students of both sexes in Katte, Sri Lanka, was assessed using a questionnaire comprising 14 multiple-choice questions on communicable diseases, 6 on nutrition, and 7 on family health. Although some 85% of the students answered most questions correctly, some gaps in their knowledge were revealed in areas such as roundworm transmission and personal hygiene (e.g., exercise and tooth-brushing). Suggestions for improving the school health education programme are set forth with four points for administrators to keep in mind when planning such programmes. (DP-E)

9376 Knabe, H. *Allgemeinmediziner, sein Team und die Gesundheitserziehung der Landbevölkerung. (General practitioner, his team, and rural health education).* Zeitschrift fur die Gesamte Hygiene und Ihre Grenzgebiete (Berlin, Germay DR), 27(7), 1981, 507-510. German.

With special reference to the situation in the German Democratic Republic, this article describes various ways in which public health education can be promoted by general practitioners and their helpers. The author reviews the application of the principles of preventive, curative, and follow-up care and the importance of cooperation between physician and district nurse and between state and public institutions. The need is stressed for health personnel to devote more attention to individual patients by encouraging an active role in health restoration, by suggesting ways of maintaining and strengthening health, and by advising on rehabilitation methods. Suggestions for further training of rural health manpower and for future work of the European Section of the International Society of Rural Medicine are put forward. (Modified journal abstract)

9377 Knight, J., Grantham-McGregor, S. *Interim report on a Jamaican project.* Cajanus (Kingston, Jamaica), 14(1), 1981, 43-52. Engl.

A "child-to-child"project at the Mount James School in St. Andrew, Jamaica, was started in September 1979 in an effort to teach to 100 schoolchildren skills that they in turn could pass on to their younger siblings. This article describes the project in terms of the target children and the curriculum. The students made toys that helped measure the development of younger children as well as learning about dental care and immunization. Based on this experience, which has not yet been evaluated, suggestions are presented for those considering similar programmes. (DP-E)

9378 Llewellyn, C.E. *Plan for a health education component for the Health Sector II bilateral assistance project in the Domincan Republic.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report No. 21, Oct 1981. 42p. Engl.

US AID's Health Sector II project aims to provide 500 rural communities in the Dominican Republic with potable water, sanitary latrines, and containers for carrying and storing household water supplies. The programme is to be complemented by a community-based health education programme aimed at ensuring that facilities are used and properly maintained. The health education programme will involve a series of workshops designed to transmit technical information and teaching skills to local health promoters and health committees and to provide them with written materials to reinforce training and supervision. This paper discusses the programme and outlines a recommended workshop design. (HC-L)

9379 Mardones-Santander, F. *Approach to breast-feeding promotion through primary health care in Chile.* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 2-4. Engl.

Taking advantage of the relatively high coverage of primary health care in Chile, the government began in 1980 a breast-feeding education programme aimed at women attending health centres and antenatal clinics and involving the training of health personnel as educators. The educational sessions take the form of group discussions during which the importance of breast-feeding, feeding requirements during pregnancy and lactation, preparation for breast-feeding, how to breast-feed, and how long to breast-feed are covered and mothers' questions are used as a point of departure for discussion. The programme is to be reinforced by a nationwide mass media campaign in 1981. (HC-L)

9380 **Robertson, B., Lekgetha, A.N.** *Health education in Bophuthatswana.* Curationis (Pretoria, South Africa), 1(4), Mar 1979, 4-7. Engl.

While Western medicine is accepted in Bophuthatswana, South Africa, traditional beliefs are still being passed on in health education teachings. Prior to the establishment of the Department of Health and Social Welfare in 1975, district health nurses sought to spread sound health education knowledge while providing patient care. Later a mobile unit travelled around Bophuthatswana, disseminating health knowledge and distributing booklets. In 1977, a survey of health education provided by regional hospitals was undertaken to determine existing problems and possible improvements and to lay the groundwork for the formulation of a health education policy for Bophuthatswana. This resulted in pilot projects from which the government was able to establish long-term goals. (EB)

9381 **Sats, L.M., Glazunov, I.S., Zyryaeva, L.A., Chazova, L.V.** *Psihologiceskaja korrekcija gotovnosti naselenija k ricastiju v profilakticeskih meroprijatijah. (Psychological correction of population readiness to corrective measures).* Terapevticheskii Arkhiv (Moscow), 54(1), 1982, 40-45. Russ. 10 refs.

The initial and long-term adherence patterns of 208 subjects involved in a preventive study of ischemic heart disease were explored using psychotherapy in order to develop appropriate recruitment approaches for various categories of individuals. Resistance to participation was easier to overcome in persons with low social status, those who tended to neglect their health, or those suffering from neurosis than it was in persons with high social status or in alcoholics. Difficulties arise in developing specific interventions and determining the efficiency of such programmes especially for long-term participation. It appears that the high-risk persons in most need of assistance are the ones who tend to discontinue participation. (Modified journal abstract)

9382 **Sekar, T.** *Role of newspapers in creating mass concern with environmental issues in India.* International Journal of Environmental Studies (London), 17(2), 1981, 115-120. Engl.

This study assesses the role of Indian newspapers in making the public aware of environmental issues. Content analysis of three leading national English dailies revealed that these papers publish news items, editorials, and articles on environmental issues of local, national, and international interest. The results of a survey of students of sciences and the humanities suggested, however, that the press plays a limited role in creating mass concern with these issues. Possible reasons for this include the lack of independent investigative reporting and the high national illiteracy rate. Two mass media/public interaction models are discussed in light of their value for the environmental problems of India. (DP-E)

9383 **Toohey, J.V., Valenzuela, G.J., Dezelsky, T.L.** *Evaluating the useability of a Spanish language drug and substance abuse education program.* Journal of Drug Education (Farmingdale, N.Y.), 11(2), 1981, 179-184. Engl.

A three-phase project in developing and evaluating a Spanish language drug and substance abuse education programme was conducted by Partners of Americas, Washington, D.C. and the Arizona State University (USA) from September 1978-August 1980. Phase 1 involved the development of a student activity booklet that helped students self-analyze their social values and relate this assessment to non-medical drug and substance abuse. Phase 2 consisted of producing a functional instructor's manual. The last phase, carried out in Acapulco and Oaxaca, Mexico, in summer 1980, evaluated the useability of these two publications as tools for drug education. A judgmental useability questionnaire was developed to measure the quality of readability and validity of the programme. (EB)

9384 **Tragler, A.T., Bhatt, S.S., Fernández, A.** *Assessment of health education in nutrition.* Journal of Tropical Pediatrics (London), 27(4), 1981, 221-223. Engl. 10 refs.

As part of a health education programme organized by the pediatric department of the Lokmanya Tilak Municipal General Hospital, Bombay, India, nutrition talks were given to the mothers of children aged less than 2 years by a specially trained hospital cook and later by a social worker. Using audiovisual aids, the teachers emphasized breast-feeding, weaning foods, the use of cheap local foods, and hygiene, giving brief, repetitive talks to groups of 10-12 mothers. Although the mothers did not completely comprehend the talks, the lessons were considered a success. Statistical data are presented on the children's anthropometric measurements and diets. (DP-E)

9385 **WHO, Geneva.** *Communicating with pictures in Nepal: results of a study.* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 15-16. Engl.

Based on a study in Nepal, seven general guidelines are presented for health educators aiming to design visual materials for teaching illiterate or semi-literate people. It is suggested that pictures cannot stand alone as teaching materials but should be used to reinforce development messages; that written materials should be directed to existing networks of literate people, such as government extension workers and schoolchildren, who can

pass their message on; that pictures and symbols should always be explained; that words should be included; and that pictures should be kept simple and as close to reality as possible. An example is included. (DP-E)

9386 **WHO, Geneva.** *Formulating health messages in visual form; a practical innovation.* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 11-12. Engl.

When a Jamaican medical student discovered that many of his patients were unable to read the written instructions accompanying their medication, he tried to help them by dividing their pillboxes into three compartments, one labeled with the rising sun to indicate morning, the 2nd with the full sun to indicate noon, and the 3rd with a kerosene lamp to indicate evening. After testing among patients revealed that most did not understand the 1st two symbols, they were changed to a broom (for morning) and a pot on the fire (for midday). (DP-E)

9387 **WHO, Geneva.** *Theatre for spreading ideas on primary health care.* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 8-10. Engl.

As part of a Zambian drama workshop designed to develop better techniques of communicating with the masses and to make theatre more relevant to the people's needs, participants visited local villages to identify common health problems. They then dramatized these problems, particularly those related to nutrition and sanitation, using mime, dance-drama, puppetry, and plays, which were then presented in the compounds. The performances were enthusiastically received and afterwards the audience was divided into discussion groups who tried to arrive at solutions to the problems presented. (DP-E)

III.5 Appropriate Technology

See also: 9360, 9461, 9462, 9464, 9523, 9738.

9388 *Tecnología para la salud en los países en desarrollo. (Health technology in developing countries).* Gaceta Médica de México (Mexico City), 117(1), Jan 1981, 18-22. Span.

This paper examines the advantages and disadvantages of health technology as practiced in the developed countries and offers some general guidelines and principles to be kept in mind when selecting health technologies for the developing countires. Briefly, the technology should be safe and effective, simple, affordable, preferably have more than one use, and be compatible with local social, cultural, and economic conditions. (HC-L)

9389 **Développement et Santé, Paris.** *Médicaments essentiels pour les pauvres: mythe ou réalité? (Essential drugs for the poor: myth or reality?).* Développement et Santé (Paris), (40), Aug 1982, 20-25. Fren.

Realizing the need to make quality, low-cost essential drugs available to the poorer segment of the population of Bangladesh, the public health centre (Gonoshasthaya Kendra) near Dacca established Gonoshasthaya Pharmaceuticals Ltd. in 1981 with the technical and financial cooperation of several British and Dutch non-governmental organizations. This article looks at some of the problems in recruiting highly-qualified personnel and examines the social and political environment regarding technology transfer and the role of WHO and UNICEF. Ways of reaching the underserved population more rapidly and of disseminating drug information to doctors and patients are also discussed. (EB)

9390 **Instituto Tecnológico de Costa Rica, Centro de Información Tecnológica, Cartago.** *Tecnología apropiada. (Appropriate technology).* Cartago, Instituto Tecnológico de Costa Rica, Centro de Información Tecnológica. Span. Refs.

The objectives of this quarterly bulletin are to present the basic concepts of appropriate technology, to integrate the various aspects of development, and to encourage and describe the results of research projects in appropriate technology in Costa Rica and Central America. Each issue will focus on a specific type of technology or development, i.e., water power, women's role in development. An important feature is a section on access to information, which contains bibliographic references, names and addresses of individuals and institutions, etc. The practical information presented is aimed at voluntary and non-governmental organizations, planners, teachers, and students, all of whom are urged to communicate their experiences to the bulletin's staff. (RMB)

9391 **Iwugo, K.O.** *Sanitation technology options for developing countries (with special reference to Africa).* Public Health (London), 95(4), Apr 1981, 189-206. Engl. 37 refs.

The author has collected and compared information on various methods of waste disposal in selected African countries. A number of technologies are described, and some costs of construction and operation are given for comparison. The sanitation systems examined include pit, compost, and bucket latrines, aqua-privies, septic tanks, and conventional sewerage. Construction plans contain illustrations and diagrams. (DP-E)

9392 **Pacey, A.** *Taking soundings for development and health.* World Health Forum (Geneva), 3(1), 1982, 38-47. Engl. 17 refs.

To obtain information for development, it is not always necessary to undertake costly surveys. Often, a broad view of the health situation in a given locality can be gained through rapid reconnaissance using 'sounding' techniques. These include field observation, talking and listening to local people, interviews with key informants, making use of existing data (e.g., health services statistics, maps, air photographs, etc.), and lay reporting on disease. This paper discusses the sounding method and gives some examples of how its techniques have been applied in practice. (HC-L)

9393 **Parado, J.P.** *Botica sa baranguay. (Community drug stores).* Studies in Family Planning (New York), 10(6/7), Jun-Jul 1979, 212-213. Engl.

The concept of community drug stores (*boticas*) was taken up by the Bohol maternal and child health/family planning project, the Philippines, when it became apparent that the money available for medicines could not meet the demand generated by the project. The *botica* is a supply of non-prescription drugs that is funded and operated by the community and sold at slightly more than cost, a small profit going to the salesperson. The role of health personnel is limited to prescribing drugs and promoting the adoption of *boticas*. The 1st *botica* was set up in February 1976 and, by April of the same year, 66 were in operation. The project hopes to reduce the cost of drugs further by making arrangements for basic drugs to be prepared and packaged locally and prescribed by generic names. (HC-L)

9394 **Richards, L.H.** *Dilemma of specificity: an approach to prototype materials by ILO.* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 20-23. Engl.

It is the aim of prototype materials to present basic information and teaching aids in such a manner that they can be adapted by the users to meet their specific needs. The possibility exists, however, that the materials will be quickly passed on in the form in which they are received and perhaps do more harm than good. This paper gives two examples of materials produced by the International Labour Office that clearly could not be used directly by the recipients and how they were adapted to different cultures. (HC-L)

9395 **Tuli, J.** *Jaipur limb.* World Health (Geneva), Dec 1981, 2-5. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

During 1980, the Jaipur Centre (India) provided more than 2 000 persons with free artificial limbs, making it the largest such institution in Asia. The Centre is run mainly through donations and its prostheses are manufactured by local craftspersons. In response to social and cultural pressures, researchers at the Centre created the Jaipur limb, an artificial leg that permits the wearer to squat and sit in the customary manner and that also has a sturdy, waterproof foot piece, shaped like a natural foot, which does not require a shoe. Manufacture of these limbs has become so efficient that a below-the-knee amputee can be fitted with an artificial leg within 45 minutes after measurements are taken and may occasionally walk out of the Centre after only a few hours. (DP-E)

9396 **Verma, N.** *Assessment of the usefulness and acceptability of eye shields under field conditions.* Leprosy Review (London), 52(2), 1981, 141-149. Engl.

Fifteen patients in south India with varying degrees of lagophthalmos and neuroparalytic keratitis were fitted with eye shields made in the field, and an assessment at 1 and 2 weeks revealed a definite improvement in eye condition. The community's acceptance of this procedure was good. An evaluation of the paramedical workers has shown that they require only minimal additional training in order to make and use these shields. There is a detailed description of the construction and application of the shield, which takes 15 minutes to make and is very cheap, consisting of adhesive plaster and glass. Illustrations and statistical data are included. (Modified journal abstract)

9397 **WHO, Geneva.** *Expanded Programme on Immunization: maintaining and improving the cold chain/Programme Elargi de Vaccination: gestion et perfectionnement de la chaine du froid.* Weekly Epidemiological Record (Geneva), 56(45), 13 Nov 1981, 355-358. Engl., Fren.

The importance of every link in the cold chain is stressed and advances in equipment available, training of those involved in operating the chain, and management processes are briefly discussed. Equipment presently being tested includes burners that will operate on polluted kerosene, cold boxes and ice-lined refigerators, liquid crystal thermometers, and time/temperature indicators. Training courses for senior and middle managers, and for repair technicians, have been developed, covering planning, starting, running, and supervising programmes and dealing with problems. Interchangeability of parts between different makes of refrigerator has been studied, so that broken-down equipment can be cannibalized if necessary. Management procedures to pinpoint problems at an early stage have also been devised. (Modified journal abstract)

IV Health Workers — Training and Utilization

IV.1 Medical Personnel

IV.1.1 Professional

See also: 9105, 9107, 9199, 9444, 9452, 9453, 9455, 9474.

9398 **Abcede, J.C.** *Training course in Japan.* World Health (Geneva), Jan 1982, 16-17. Engl.
Also published in Arabic, French, Italian, Persian, Portuguese, Russian, and Spanish.

Held annually since 1963 at the Research Institute for Tuberculosis in Tokyo, the Japan/WHO International Tuberculosis Training Course has provided a 4-month programme for 287 doctors from 37 countries. Through group discussion, practice, and workshops in analytical studies of TB problems and national TB programmes, participants are encouraged to develop their own rational and critical thinking, to study their own country's problems, and to seek their own solutions. The course includes observation visits to various medical institutions, hospitals, and cultural centres in Japan and, upon completion, the participants spend 1-2 weeks in the Republic of Korea, Malaysia, or the Philippines, observing or supervising operations in peripheral TB programmes. (EB)

9399 **Blizard, P.J.** *Departmental objectives and curriculum packages for public health and community medicine in Indonesia.* Jakarta, Departemen Pendidikan dan Kebudayaan, 1977. 17p. Engl. 5 refs.

Given the fact that Indonesian medical schools devote over 90% of their time to teaching curative medicine and provide little training in preventive medicine, the author discusses the need for reorientation of the curriculum towards a dual focus and identifies some of the basic skills involved in public health and community medicine. Four major defects in the present system of medical training are described to illustrate the central problem, which is that governmental policy is changing more rapidly in some crucial respects than is the undergraduate training provided in Indonesian medical schools. Table 1 lists 14 basic planning and administrative skills and 13 health education skills required by doctors for the practice of effective community medicine and public health. Suggestions for curriculum packages and departmental objectives are outlined. (EB)

9400 **Blizard, P.J.** *Approach to the construction of curriculum packages for faculties of medicine.* Jakarta, Consortium of Medical Sciences, Bulletin Series, No. 11, Apr 1976. 22p. Engl. 13 refs.

Aimed at helping Indonesian medical school staff develop a selective, integrated, relevant core curriculum, this paper focuses on the general nature of curriculum packages. The following questions are considered: (a) what is a curriculum package? (b) what are the bases on which curriculum packages can be selected in different subject areas? (c) how can curriculum packages assist in the development of selective, integrated, relevant core curricula? and (d) where and how do curriculum packages fit within the framework of educational objectives? It illustrates one example of using a common primary basis to assist the development of integrated curriculum packages in clinical pathology, microbiology, and parasitology, and describes a series of steps necessary to the formulation, implementation, and evaluation of educational objectives at all levels. (EB)

9401 **Blizard, P.J.** *Method for constructing instructional objectives for faculties of medicine in Indonesia.* Jakarta, Departemen Pendidikan dan Kebudayaan, 1976. 27p. Engl. 6 refs.

This booklet examines the advantages of determining instructional objectives for medical faculties, methods of writing instructional objectives, and their effective use by staff and students. Using as a sample a course in obstetrics and gynaecology, it shows how to break up the course of study into a series of curriculum packages and ways of identifying the topics appropriate to an objective and levels within a particular subject. The concept of general and specific educational objectives provides a useful tool for teachers to identify a selective, integrated, core curriculum directly relevant to Indonesia's present and future health needs. The appendix includes two examples of inter-related curriculum packages and a set of illustrative verbs. (EB)

9402 **Blizard, P.J.** *Some ways to make lecturing a more effective method of teaching.* Jakarta, Consortium of Medical Sciences, Bulletin Series, No. 5, Aug 1975. 32p. Engl. 14 refs.

In examining ways of improving the lecture method of teaching in Indonesian medical schools, the author considers the following: (a) psychology of learning as it relates to the purpose of lecturing; (b) preparing for a lecture: approaches, plans and delivery, use of materials and aids; and (c) assessment of lectures and lecturers.

He suggests the need for change in the current practices of lecturing so that students can both acquire and retain information and knowledge. The appendix includes a sample problem for a problem-centred group, two questionnaires to be used by students in lecture evaluation, and a checklist used by educationists to help trainee teachers. (EB)

9403 **Blizard, P.J.** *Oral examinations: their purposes, their strengths and their weaknesses, and some guide-lines for their future development as a method of assessment.* Jakarta, Consortium of Medical Sciences, Bulletin Series, No. 4, May 1975. 23p. Engl. 7 refs.

Within the context of Indonesian medical schools the author seeks to indicate the range of purpose for which oral examinations can be used, identify some of the strengths and weaknesses, and suggest improvements for oral tests as an educational tool. Readers are requested to provide their personal answers to a 4-page questionnaire on the philosophy, methodology, and validity of oral examinations of clinical skills, which appears in the appendix. (EB)

9404 **Chandra, A.** *Surgical services in rural india.* Journal of the Indian Medical Association (Calcutta, India) 76(5), 1 Mar 1981, 88-89. Engl.

Although the availability of surgical services has greatly increased in India, problems still remain in the areas of distribution of surgeons and the quality of care. The author recommends a surgical training programme comprising three levels: teachers, researchers, and surgical specialists who have undergone an apprenticeship of at least 5 years. These specialists would serve rotating 6-month tours of duty on mobile surgical units that would visit target villages for one week at predetermined times. (DP-E)

9405 **Diallo, J.S.** *Auto-enseignement. (Self-teaching).* Médecine d'Afrique Noire (Paris), 29(1), Jan 1982, 63-66. Fren.

Given the high student:teacher ratios, the diversity of subject matter to be covered, and the proven effectiveness of audiovisual techniques, a strong case for the adoption of teaching machines in African medical schools is made. This paper describes how teaching machines work; what material requirements, organizational changes, and preparation are involved in their introduction; and their advantages for teachers and students. Foremost among these is that self-teaching by means of teaching machines is a good way of preparing students for a lifetime of acquiring new knowledge on their own initiative. (HC-L)

9406 **Effendi, Hasjim, Jazir, J.** *Experiment in active teaching and learning in physiology.* Jakarta, Consortium of Medical Sciences, Bulletin Series, No. 7, Dec 1975. 16p. Engl. 6 refs.

The results of an investigation into the effectiveness of 'active' as opposed to 'passive' methods of teaching in physiology are reported. Because this study enabled the authors to test other research carried out mainly in the UK, Australia, and the USA in terms of its application to the Indonesian context, it was considered especially important. A closer look into ways of making passive lectures more active is suggested. The appendix includes 25 sample questions for examination of students after active teaching. (EB)

9407 **Israel, R., Lamptey, P.** *Nutrition training manual catalogue for health professionals, trainers and field workers in developing countries.* Newton, Mass., Education Development Center, International Nutrition Communication Service, n.d. 102p. Engl.

This catalogue reviews 116 training manuals on nutrition for health professionals, trainers, and fieldworkers in developing countries that are considered exemplary in terms of their technical content and/or teaching methodology. The term 'manual' is taken to include textbooks, instructional guides, curriculum modules (but not formal school curricula), and course outlines. Each entry indicates the language, region, target group, emphasis, sponsor, publisher, and source of the item as well as the review, and entries are grouped under the following headings: general nutrition, primary health care, mother and child feeding, nutrition assessment and surveillance, nutrition education, nutrition appropriate technology, nutrition rehabilitation and special deficiencies, and programme management. A number of curriculum development needs identified during the process of compiling the catalogue are presented in the introduction. (HC-L)

9408 **Jackovljevic, D.** *Medical faculty at Novi Sad, Yugoslavia: new trends in the promotion of a system of medical education.* WHO Public Health Papers (Geneva), 2(71), 1980, 191-202. Engl.

Three important developments are identified in this account of the medical school at Novi Sad, Yugoslavia. The 1st two are organizational and administrative changes brought about by government legislation and involving the participation of everyone related to the institution, including the recipients of the services provided, in self-management communities of interest who approve plans and budgets and ensure social relevance. The 3rd, a change in the medical curriculum, arose from a local initiative to make medical training more relevant to the needs of the community. (Modified journal abstract)

9409 **Kale, O.O.** *Model case-study for teaching the principles of emergency medical referrals in a rural African setting.* Medical Education (Oxford, UK), 15(6), Nov 1981, 383-388. Engl.

This article describes a model case-study, employed at the University of Ibadan, Nigeria, for teaching the principles of emergency medical referrals in a rural African setting. Undertaken by small groups of students, the model effectively combines the advantages of group interaction with those inherent in a problem-solving approach. It has helped not only to stimulate student interest in a subject that many have found rather boring and theoretical, as with most other subjects related to the

organization of health services, but also to provide a pointer to the effectiveness of case methods as teaching tools. (Modified journal abstract)

9410 **Maddison, D.** *Innovation, ideology and innocence.* Social Science and Medicine (Aberdeen, UK), 16(6), 1982, 623-628. Engl. 14 refs.
Seventh International Conference on Social Science and Medicine, Leeuwenhorst, Netherlands, 22-26 Jun 1981.
The author suggests that a state of 'innocence' is necessary if new ideas are to be accepted and implemented in medical education. In 1979, WHO formed the Network of Community-oriented Educational Institutions for Health Sciences to promote educational and organizational innovations aimed at the preparation of health professionals who will be better equipped and better motivated to meet the real health needs of the populations they are to serve. Such innovations encounter many obstacles, of which ideologically-based inflexibility of thought is the most important. The network's organization and goals are discussed. (DP-E)

9411 **Sebai, Z.A., Abu Sabaa, H.M., Shalabi, S., Bayoumi, R.A., Milier, D.** *Health in Khulais villages, Saudi Arabia: an educational project.* Medical Education (Oxford, UK), 15(5), Sep 1981, 310-314. Engl. 8 refs.
This paper describes a week-long field work project that involved 25 4th-year medical students from the Riyadh Faculty of Medicine, Saudi Arabia, and seven medical professionals. The project was carried out primarily by the students themselves and included a study of child health, a house-to-house survey, a study of the epidemiology of malaria and schistosomiasis, immunization of preschool children, a health education programme, and an evaluation of the local health centre's activities. The project not only enhanced the students' appreciation of rural health problems but also prompted the local doctor to ask for more vaccines and laboratory facilities, the headmasters to request more health education materials, the community leaders to seek improvements in the health services, and the Faculty Board to approve funds for the next year's field project. (HC-L)

9412 **Shah, M.** *Tribhuvan University Institute of Medicine, Nepal.* WHO Public Health Papers (Geneva), 2(71), 1980, 81-96. Engl.
Founded in 1972, the Institute of Medicine at Tribhuvan University was required to meet Nepal's immediate need for health personnel, especially village health workers, and to rationalize the manpower categories in the middle and higher levels with an eye to future demands. The author, formerly Dean of the Institute, looks at the ways in which the administrative structure had to be modified to develop several different training programmes on the 12 campuses and outlines the medical curriculum and its objectives. He further considers the clinical and non-clinical roles of the previously non-existent community physician and the need for cooperation between the ministry of health and the Institute. (EB)

9413 **Slabber, C.F., van der Spuy, H.J., van den Ende, J.** *Doelformulering in 'n geneeskunde-fakulteit. (Formulation of educational aims in a medical faculty).* South African Medical Journal (Cape Town), 60(23), 5 Dec 1981, 899-901. Afrikaans. 9 refs.
This article looks at the process of curriculum re-evaluation carried out by the Faculty of Medicine of the University of the Orange Free State in South Africa. The 1st stage of curriculum development was presentation of the general aims of its undergraduate medical training, with the formulation of 17 general faculty objectives. Other aspects considered are: intermediate objectives; basic, clinical, and practical training; and continuing education. (EB)

9414 **Villarreal, R.** *Universidad Autónoma Metropolitana, Xochimilco, México; an interdisciplinary innovation in medical education.* WHO Public Health Papers (Geneva), 2(71), 1980, 71-80. Engl.
Also published in French and Spanish.
Founded in 1973, the *Universidad Autónoma Metropolitana* in Mexico City has three campuses with a capacity of 15 000 students each. To encourage interdisciplinary teaching and to achieve flexibility, the programmes offered are not separated into schools or faculties but are grouped together in four divisions: basic sciences and engineering, health and biological sciences, social sciences and humanities, and design arts and sciences. The author describes the study programmes, teaching systems, health personnel training, and curriculum design. An example of teaching-learning modules is presented to clarify underlying concepts. Since its students are involved in practical community work from the beginning, the university places much emphasis on the importance of learning by problem-solving and on the relevance of what is taught to the social conditions of Mexico. (EB)

IV.1.2 Auxiliary

See also: 9105, 9455, 9460, 9466, 9471, 9473, 9493, 9725.

9415 **Bhatia, S.** *Training community health workers in rural Bangladesh.* World Health Forum (Geneva), 2(4), 1981, 491-494. Engl.
In September 1977, the International Centre for Diarrheal Disease Research (Bangladesh) launched a family planning and health services programme in 70 villages (population about 80 000). This article describes the recruitment, training, duties, and accomplishments of 80 female village workers. The programme has proved to be of benefit to the health workers themselves as well as to the villagers they served. Some statistical data are included. (DP-E)

9416 **Gutierrez Martinez, C., García Herrera, E.** *Elaboración y desarrollo de un programa de planificación familiar a boticarias en México. (Planning and development of a family planning pro-*

gramme for pharmacists in Mexico). Salud Pública de México (Mexico City), 23(4), Jul-Aug 1981, 405-411. Span. 14 refs.

The planning and administration of a course for pharmacists developed by Mexico's *Coordinación Nacional de Planificación Familiar* with assistance from the Pathfinder Fund is described. A total of 507 staff from 379 pharmacies, all within 2 hours drive from Mexico City, attended 24 sessions. The course covered demography, breast-feeding, vaccination, sexually transmissible diseases, reproductive physiology, and contraceptive methods. A detailed course curriculum is included. (RMB)

9417 **Seuellart, J.M., Philippe, B.** *Agents communautaires de santé; leur rôle capital dans les zones isolées et dispersées; exemple des Iles Tuamotu-Gambier. (Community health agents; their crucial role in remote and scattered areas; the example of the Tuamotu-Gambier Islands).* Médecine Tropicale (Marseilles, France), 41(4), Jul-Aug 1981, 373-377. Fren.

Providing health services to a population of 7 500 spread over 44 islands is the peculiar challenge faced by the government of Tuamotu-Gambier, French Polynesia. The only permanent health facility on most islands is the medical stock in the charge of a volunteer with some rudimentary training in first aid and the treatment of common ailments. These volunteers are now being trained for an expanded role in public health as community health workers. This paper describes the new programme, with emphasis on those aspects aimed at keeping up morale in a situation that, by necessity, isolates this worker from the rest of the health team. (HC-L)

9418 **Wilson, L.G.** *Utilizing dispersed mental health para-professionals for scattered Pacific islands; a Micronesian experience.* Community Mental Health Journal (New York), 17(2), Summer 1981, 161-170. Engl. 10 refs.

A mental health programme developed for the huge tropical Pacific area of Micronesia is described. Training of paraprofessionals as mental health coordinators for the six main island districts of Micronesia was undertaken to respond to the most pressing mental health needs of these scattered islands. Adequate follow-up of the chronically mentally ill was the 1st priority with less urgent needs addressed secondarily. Frequent on-island visits by the supervising psychiatrist to teach patient-related evaluation and treatment procedures was of importance. Three illustrative case histories are included. A programme with dispersed paraprofessional coverage and centralized supervision may have relevance for other large areas with scattered and scarce population. (Modified journal abstract)

IV.2 Nursing Personnel

IV.2.1 Professional

See also: 9105, 9351, 9364, 9455.

9419 **Angeles, C. de los** *AKAP nurses in primary health care TB control program.* Philippine Journal of Nursing (Manila), 50(3), Jul-Sep 1980, 86. Engl.

AKAP (in English, "embrace"), a national private organization committed to the promotion of primary care in the Philippines, sponsors nurses who live and identify with the people they serve. Their role in the tuberculosis control programme is briefly described. (DP-E)

9420 **Harnar, R.** *Conceptual framework of community health orientation.* Nursing Journal of India (New Delhi), 73(1), 1982, 19-21. Engl.

Assessment (data collection and analysis, choice of alternate plans), intervention (implementing a plan for nursing action), and evaluation (of the action's outcome) are seen as the three steps of the nursing process presently being taught in India's Community Health-Oriented Nursing Education Programme. The specific skills to be obtained in each of these areas are outlined. Some useful references on nurses' curricula are mentioned, with emphasis on the three levels of prevention proposed by Leavell. (DP-E)

9421 **Hattingh, M.E.** *Tuberculosis management — some aspects of the role of the nurse manager.* Curationis (Pretoria, South Africa), 4(3), Dec 1981, 26-28. Engl.

In this essay the author presents this broad outline of a supervisory community health nurse's role in a health region regarding tuberculosis (TB) management and highlights some major aspects. From records, interviews, and observations, the community health nurse collects data on the physical, social, psychological, and environmental aspects of the endemic region. In the planning phase she must interpret the national TB policy, determine case-finding priorities, set objectives, and select and record a plan of action. She evaluates, with the TB management team, the effectiveness of the action plan on a monthly basis. Other duties include investigating problems in achieving objectives, controlling quality of nursing care, regulating expenditures, and monitoring and evaluating statistical data on epidemiolgical trends of the various types of TB. (EB)

9422 **Jato, M.N.** *Enseignement des soins de santé primaires aux futurs enseignants du nursing. (Teaching primary health care to future nursing teachers).* Développement et Santé (Paris), (40), Aug 1982, 26-27. Fren.

This article presents an overview of the curriculum at the *Centre d'Enseignement Supérieur en Soins Infirmiers* in Yaoundé, Cameroon. A 2-year programme is offered to graduate nurses from francophone Africa with several years of experience in practical nursing. In the 1st year special emphasis is placed on field work in primary health care. Assigned to selected communities, the students learn to identify health problems and find solutions and gain in-depth knowledge of the families and their surroundings. Active participation in the activities of local health centres is encouraged. A final report is submitted by the students. In the 2nd part of the

course, students meet with community officials and discuss the formulation of health care programmes. The community then establishes priorities in a health care plan of action while the student proposes practical solutions. (EB)

9423 **Mashaba, T.G.** *Composition of the nursing profession in South Africa in the mid-seventies and its implications for provision of health care.* Journal of Advanced Nursing (Oxford, UK), 6(5), Sep 1981, 339-347. Engl. 8 refs.

Analysis of the composition of the nursing profession in South Africa revealed that the nurses were a heterogenous group with diverse dialects and cultures drawn from all social classes. Because of the unifying influence of the statutory control through the South African Nursing Council and the two official languages, the nurses were organized into a strong and stable profession. Characteristics studied in this article include age, marital status, sex, qualifications, registration, and specialty training; the findings are then used as a basis for suggestions for improving nursing services. Some statistical data are included. (Modified journal abstract)

9424 **Olivier, L.** *Role van die gemeenskapsverpleegkundige in geestesgesondheid. (Role of the community health nurse in mental health).* Curationis (Pretoria, South Africa), 4(3), Dec 1981, 29-31. Afrikaans.

This article explores the vital role played by the community nurse in the prevention of mental illness and the promotion of mental health. Her personal contact with community members of all ages enables her to detect early signs of mental illness. She is also in the ideal position to promote mental health. Her involvement in all levels of prevention requires her to have adequate training in the provision of basic psychiatric services. Some statistical data from the South African Department of Health, Welfare and Pensions are included. (Modified journal abstract)

9425 **Selvwright, M.J.** *Nurse practitioners in primary health care: the Jamaican experience; part 1.* International Nursing Review (Geneva), 29(1), Jan-Feb 1982, 22-24. Engl.

In September 1974, the Nurses' Association of Jamaica submitted to the government a proposal for the establishment of a nurse practitioner programme that was later widely accepted and implemented. This article examines the programme's philosophy, purpose, and objectives and the concept of the nurse practitioner. The nurse practitioner's clinical, educational, administrative, research, and public relations functions and activities are outlined. (DP-E)

9426 **Stephens, T.** *India: nurses provide curative, preventive, rehabilitative care.* American Nurse (Kansas City, Mo.), 13(6), Jun 1981, 9-10. Engl.

This paper briefly describes the many ways in which India's 139 000 nurses, 135 000 midwives, 66 000 auxiliary nurse-midwives, and 9 000 health visitors are deployed in rural and urban areas throughout the country. (HC-L)

IV.3 Midwives and Family Planning Workers

IV.3.1 Professional

See also: 9426.

9427 **Vevor, E.** *National School of Midwifery, Lome, Togo.* WHO Public Health Papers (Geneva), 2(71), 1980, 159-170. Engl.
Also published in French and Spanish.

In the 1st half of this report, the author gives an account of Togo's health situation and the beliefs and customs of the Togolese people regarding traditional obstetrics, pregnancy, prenatal supervision, taboos, confinement, delivery, the placenta, and maternal and infant care. The 2nd half deals with the training of midwives at the National School of Midwifery in Lomé. Founded in 1964, the school offers a 3-year course with a curriculum based on the French system and enlarged to include tropical diseases and their epidemiology, nutrition, health education, family health, and public health administration. The biological, sociological, and cultural factors that had to be taken into consideration when adapting the French system to the needs of the Togolese are described. (EB)

IV.3.2 Auxiliary

See also: 9428, 9472.

9428 *Apa kata dukun bayi. (General look at traditional midwives).* Yogyakarta, Indonesia, Gadjah Mada University, 1979. 116p. Engl., Indonesian.

This paper examines the role, attitudes, and duties of the traditional midwife in Ngaglik, Indonesia. Ranging in age from 40-76 years, these women have no formal education; 4 out of 20 midwives have attended nursing courses. Described are the following: procedures carried out during normal births; actions undertaken when encountering complications; postpartum care of mother and infant, with emphasis on the various types of massages given both until 35 days after birth; traditional beliefs; and advice on family welfare. The midwives, not approving of abortions, also counsel their patients on family planning and give special *walik* massages to prevent pregnancy. (EB)

9429 **Chaturvedi, S.K.** *Attitudes and practices of traditional birth attendants in rural Rajasthan (India).* Archives of Child Health (Calcutta, India), 22(3), 1980, 54-57. Engl.

An estimated 80% of all deliveries in rural India are attended by traditional birth attendants (*dais*) and it is fairly widely accepted that they should be incorporated into any maternal and child health services scheme. This paper summarizes the results of interviews with 38

dais working in the catchment area of the Rural Health Training Centre, Naila (population 35 000) regarding their delivery technique, means of cutting the cord, advice to mother during pregnancy, method of payment, etc. On the basis of the survey findings, it is recommended that *dais* be trained to use aseptic procedures, identify high-risk mothers, and campaign for immunization. (HC-L)

9430 **García, J.F.** *Formation d'accoucheuses de village à l'hôpital de Ouahigouya (Haute Volta). (Training for rural midwives in Ouahigouya Hospital (Upper Volta)).* Médecine Tropicale (Marseilles, France), 41(4), Jul-Aug 1981, 379-383. Fren.

In Ouahigouya District, Upper Volta, only an estimated 12% of all deliveries take place in a health facility. Under the country's programme for the extension of basic health services, individuals recommended by their village chiefs are being trained as village midwives at the nearest maternal and child health centre. This paper outlines the principal elements of the training programme. Judging by the number of trainees coming forward, the programme is meeting a felt need, but no formal evaluation has been conducted to date. (HC-L)

9431 **Maggay-Maglacas, A., Pizurki, H.** *Traditional birth attendant in seven countries: case studies in utilization and training.* Geneva, WHO, WHO Public Health Papers, No. 75, 1981. 211p. Engl.

This monograph describes the traditional birth attendant (TBA) training programmes and curricula of Ecuador, Honduras, Philippines, Sierra Leone, Sudan, and Thailand, pointing out special features of each programme such as the nation-wide survey and national registry of TBAs in the Philippines, the replacement of TBAs by 'village midwives' in Sudan, and the utilization of TBAs in the family planning programme in Thailand. A justification for starting a TBA training programme in Sri Lanka — a country with impressive health statistics but considerable regional disparity — is put forward. (HC-L)

9432 **Okubagzi, G.** *Characteristics and practices of traditional birth attendants in Gondar region, Ethiopia.* Ethiopian Medical Journal (Addis Ababa), 16(4), Oct 1978, 149-153. Engl. 8 refs.

The characteristics and practices of 76 traditional birth attendants (TBAs) in eight towns of the Gondar region of Ethiopia were studied by a questionnaire; the results are discussed and presented as statistical data. All TBAs were illiterate, married mothers with at least one child; 76% were aged 35-54 years. Their knowledge was limited, as was their period of employment, factors which may facilitate their training in scientific management of pregnancy, labour, and the puerperium. (Modified journal abstract)

IV.4 Dental Personnel

IV.4.1 Professional

See also: 9434, 9546.

9433 **Hermann, H.G.** *Dentistry in China.* Journal of the Oregon Dental Association (Portland, Ore.), 51(2), Winter 1981, 49-52. Engl.

Dentistry in the People's Republic of China is described by a US visitor. The 23 training facilities and the dentists' curriculum (6 years in length) are described. There are dental hospitals in the big cities and dental departments in various general hospitals, but there is a severe shortage of personnel. Treatment methods combine traditional and Western medical techniques with the emphasis on fast results at little expense. Equipment and financing of dental services are briefly discussed. The author feels that dentistry in China is politically and economically locked into a system that precludes rapid advancement. (DP-E)

IV.4.2 Auxiliary

See also: 9203.

9434 **Guerrero, R., Tasama, C.** *Universidad del Valle, Cali, Colombia: dental manpower training.* WHO Public Health Papers (Geneva), 2(71), 1980, 35-45. Engl.

Concerned with providing community-oriented training, the dental school in Cali, Colombia, emphasizes social dentistry and trains dentists to manage a dental team comprising auxiliary dental nurses and dental hygienists who are responsible for community preventive and curative work, especially in schools. Strong government and community support has also made it possible to train dental workers at all levels. The importance of this cooperative effort is demonstrated by the achievements of this programme compared with the failure of an earlier attempt in 1962 to train and deploy auxiliary dental nurses. (Modified journal abstract)

IV.6 Environmental Health Workers

9435 **Leonhardt, T.C., Awantang, F.** *Evaluation of practical training of sanitation agents: Sine-Saloum Primary Health Care Project Senegal.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report No. 44, Jun 1982. 88p. Engl., Fren.

In a joint US AID/ministry of health effort, a 2-week practical course in simple sanitation interventions and community development was designed and administered to graduates of Senegal's 2-year programme for *techniciens d'assainissment itinérant* (TIAs). This paper describes the role of the TIA, the nature and quality of TIA basic training, the 2-week training course and teaching method, post-training activities, and recommendations for strengthening the programme. Ap-

pendices include the 2-week course curriculum, the basic training curriculum (in French), laws governing the primary health care programme (in French), etc. (HC-L)

9436 **Stewart, G., Rull, C.** *Training of rural community development workers in health education; with special reference to water supply protection and use /maintenance of sanitation facilities.* Arlington, Va., Water and Sanitation for Health Project, WASH Technical Report No. 3, Mar 1981. 11p. Engl. 18 refs.

The functions of a rural community development worker *vis-à-vis* educating the public regarding the maintenance and use of water and sanitation facilities are as follows: to make a social diagnosis, to stimulate behavioural change, to possess adequate technical knowledge, to maintain community support systems, and to participate in programme evaluation. This paper discusses these functions and outlines a student selection, training, and working methodology that will encourage active community participation in all areas of the programme. The document was prepared for the Mandara Mountains Water Resource Project, Cameroon. (HC-L)

IV.7 Occupational and Physical Therapists

9437 **Clark, S.L., Schlachter, S.** *Development of clinical education sites in an area health education system.* Physical Therapy (Washington, D.C.), 61(6), Jun 1981, 904-906. Engl.

In 1974, the Department of Physical Therapy of the University of Kentucky (USA) was faced with two problems: overburdening of local clinical facilities by students and an exodus of physiotherapists from the state. The advent of the area health education system offered the opportunity for the clinical education programmes to develop non-traditional clinical sites across the state. The development and use of these non-traditional sites in predominantly rural areas has become an integral part of the clinical education programme. Local facilities are no longer inundated with students. The retention rate of graduates has improved in the 7 years of the programme from 36% in 1972 to 81% in 1979. (Modified journal abstract)

9438 **Wisley, L.D.** *Physical therapy services in rural hospital settings.* Physical Therapy (Washington, D.C.), 61(8), Aug 1981, 1173-1174. Engl.

A 188-bed acute care hospital in Mount Vernon, Illinois, has provided two smaller 80-bed rural hospitals with one of its eight full-time physiotherapists. The physiotherapist divides his time between the two rural hospitals on a rotating basis in such a way as to establish a good working relationship with the medical and support staff of both; at the same time, he enjoys peer affiliation with the larger hospital on a continuous basis through monthly meetings and educational seminars. The shared services programme has resulted in an increase in the number of physiotherapy treatments by 3 000 in one hospital and 3 200 in the other during the 18 months of its operation and it is concluded that the model is an appropriate method of cost containment and cost effectiveness that can be applied to other services as well as physiotherapy. (HC-L)

IV.8 Health Educators

See also: 9366.

9439 **Adesiyi, J.D., Brieger, W.R.** *Health education specialization in Africa: roles in conflict.* International Journal of Health Education (Geneva), 24(1), Jan-Mar 1981, 26-32. Engl. Refs.

Health education in Africa is examined in terms of educational foundations and functions, professional training, expectations and attitudes, extension and termination, and profession-specific training. It is concluded that two levels of professional training are needed: 1) a functional training that will prepare different categories of health workers in the educational aspects of their duties and result in improved job performance and 2) a specialized training based on professional commitment and personal interest following a basic general education. These options are now being explored in Ibadan, Nigeria. (DP-E)

9440 **Brieger, W.R., Adesiyi, J.D.** *Urban community health education in Africa.* International Quarterly of Community Health Education (Farmingdale, N.Y.), 2(2), 1982, 109-121. Engl. 23 refs.

Experiences of health educator trainees in Ibadan, Nigeria, show that a community development, self-help approach to health education is necessary to enable practitioners to deal with community variables such as identity, internal integration, group orientation, external linkage, and resource characteristics. This article describes attempts to apply this approach in the Ibadan setting. Failures are attributed to Western bias in teaching materials and the general education system; trainers of health educators are consequently urged to provide training experiences with a cultural sensitivity that encourages students to work with the community as they find it. (Modified journal abstract)

9441 **Ward, W.B., Neumann, A.K., Pappoe, M.E.** *Community health education in rural Ghana: the Danfa Project — an assessment of accomplishments.* International Quarterly of Community Health Education (Farmingdale, N.Y.), 2(2), 1982, 143-155. Engl. 12 refs.

As part of the 1971-1977 Danfa Comprehensive Rural Health and Family Planning Project implemented in four areas of Ghana, eight health education assistants (two community health nurses, two nutrition technical officers, two family planning workers, and two sanitation assistants) received 6 months training in health education, community organization, and multipurpose health work. This article describes their activities and assesses their impact on the project population with the help of statistical data. The areas showing the greatest improvement were those where the emphasis was on getting the people to participate in existing programmes and where

there was an immediate possibility for the individual to take a desired action. (DP-E)

IV.9 Teaching Aids

IV.9.1 Health Care, Nutrition, and Disease Control

See also: 9405.

9442 *Handbook of ophthalmology for developing countries. 2 edition.* Oxford, UK, Oxford University Press, 1980. 157p. Engl.

This handbook highlights the special ophthalmic problems peculiar to developing countries as an aid to medical students and physicians in rural areas who lack special training in ophthalmology. The author, an ophthalmologist, has practiced extensively in Kenya and the Republic of Korea. Separate chapters cover basic considerations, examinations, the lids and nasolacrimal apparatus, the conjunctiva, trachoma, the cornea, the sclera and optic nerve, onchocerciasis and leprosy, visual disturbance, trauma, and rural ophthalmology. An appendix describes the local production of eye drops. An index and many illustrations are included. (DP-E)

9443 **Austin, J.E.** *Confronting urban malnutrition: the design of nutrition programs.* Washington, D.C., The World Bank, World Bank Staff Occasional Papers, No. 28, 1980. 119p. Engl.

This paper attempts to provide a framework for systematically mounting an urban nutrition intervention programme in a developing country and contains a series of tentative guidelines for designing the components of the same. The various chapters focus on the following: nutrition deficiencies and their causes and the identification of a target group; information on the urban environment, economic behaviour, and nutrition status that the planner needs; important considerations in the design of nine possible nutrition programmes — nutrition education, on-site feeding, take-home feeding, nutrient dense foods, ration shops, food coupons, fortification, direct nutrient dosage, and food processing and distribution; means by which planners can evaluate options for nutrition programmes; and programme adjustment. The appendix contains a review of frequently encountered nutrient deficiencies. (HC-L)

9444 **Bennett, F.J.** University of Nairobi, Department of Community Health, Nairobi. *Community diagnosis and health action: a manual for tropical and rural areas.* London, Macmillan, Tropical Community Health Manuals Series, 1979. 190p. Engl.

This clearly-written, well-organized manual is intended to enable the student or health worker to undertake the following elements of community diagnosis: enlist community support for fieldwork; devise forms for gathering information; select valid and acceptable screening tests; elicit the felt problems and needs of the community; select a random sample of homes using a cluster sample technique; execute a multiple objective survey; assess health demands in relation to health needs; obtain detailed epidemiological information on nutritional status or any other high priority problem; analyze the data resulting from the survey; discuss the data with concerned people, including community leaders, and plan appropriate health interventions; and evaluate the results of the intervention. Advice on report writing, special surveys (e.g., mental health), and statistical methods are included. (HC-L)

9445 **Dawson, C.R., Jones, B.R., Tarizzon, M.L.** *Guide to trachoma control in programmes for the prevention of blindness.* Geneva, WHO, 1981. 56p. Engl.

This booklet, a complete revision of a 1973 WHO publication, deals with the definition of trachoma and related infections, clinical aspects, epidemiology of trachoma, the organization of trachoma control programmes, therapeutic strategies, training, health education, and the evaluation of results and of operational and administrative efficiency. The guide is a concise summary of knowledge on trachoma and its prevention and control by acknowledged experts on the subject. A bibliography and some illustrations are included. (DP-E)

9446 **Elford, J.** *How to look after a refrigerator.* London, Appropriate Health Resources and Technologies Action Group, 1980. 58p. Engl.

This handbook contains simple, illustrated instructions for positioning the refrigerator, storing vaccines, and dealing with emergencies. The operation of absorption refrigerators powered by kerosene, gas, and electricity and electrically-powered compression refrigerators is described; daily and weekly maintenance chores are outlined. A separate section covers cold boxes and vaccine carriers. (DP-E)

9447 **Harvard University, Institute for International Development, Cambridge, Mass.** *Nutrition intervention in developing countries; an overview.* Cambridge, Mass., Oelgeschlager, Gunn and Hain, 1981. 225p. Engl. Refs.

One of a series, this manual deals with special studies on nutrition interventions in developing countries. The purpose, limitations, organization, planning, rationale, and relationships of interventions are explained in the introduction. Following chapters concern: the definitions and rationale, key design questions, and costs and effectiveness of supplementary feeding; nutrition education, fortification, formulated foods, consumer food price subsidies, agricultural production, technical change, and nutrition goals; and integrated nutrition programmes and primary health care. A selected bibliography on nutrition planning, evaluation, and on the main types of nutrition intervention, an index, and statistical data are included. (AF)

9448 **Healey, A.** *Chat sheet.* Community Outlook (London), 8 Jul 1981, 239-241. Engl.

Fifteen points for British health workers to keep in mind

when dealing with Asian patients whose command of English is less than perfect are presented; they could just as well be used by any health worker giving instructions in a language other than the patient's own. These points included speaking clearly and slowly but not loudly, using simple and not idiomatic words and sentences with active verbs, giving instructions in a logical sequence, and sticking to one topic at a time. In addition, health workers must check back to make sure that the patient is understanding, rather than merely repeating, the words of a conversation. (DP-E)

9449 **ILO, Geneva.** *Guide to health and hygiene in agricultural work*. Geneva, ILO, 1979. 309p. Engl. 17 refs.

This handbook was developed for use by all persons and bodies responsible for health and hygiene in the agricultural sector in the developing world. The various chapters treat the following: living conditions (human and animal) and environmental hygiene; occupational physiology and ergonomics; prevention and management of occupational pesticide poisonings (including toxic properties of specific classes of pesticides and other chemical substances); occupational diseases in agriculture (including those arising from climate, exposure to dust, contact with plants, and snake or insect bites); zoonoses and infectious and parasitic diseases; and organization of occupational health services and medical inspection of labour in agriculture. Line drawings of the water supply and waste disposal equipment and facilities recommended in the chapter on environmental health are included. (HC-L)

9450 **Jasmin, L., Jasmini, M.A.** *Manuel national de vaccination. (National vaccination manual)*. Port-au-Prince, Haiti, Département de la Santé Publique et de la Population, 1978. 171p. Fren.

This handbook contains all the information that health personnel in Haiti need to know about vaccination. One chapter each is devoted to the characteristics and prevention of tetanus, tuberculosis, diphtheria, whooping cough, poliomyelitis, typhoid, measles, and human rabies. Other chapters discuss complications of vaccination (particularly allergic reactions), antisepsis and vaccination, the elements and management of mass campaigns and routine vaccination, and vaccination and population growth. Questions and answers, sample vaccination forms, and a subject index are included. (HC-L)

9451 **Lennox, R.** *Hints on the setting and evaluation of multiple choice questions of the one from five type*. Jakarta, Departemen Pendidikan dan Kebudayaan, 1976. 20p. Engl.

The purpose of this booklet is to present some suggestions on ways of preparing multiple choice questions for examination papers. It is based on the practice of a medical school department in its undergraduate degree examinations in pathology. The 1st part deals with the lay-out of the examination paper, the wording of questions, avoiding illegitimate inferences, and recommended variant formats. Under hints on scoring the author considers the following: adding marks to different types of questions, more than one response to a question, and differential weightings of responses. The publication deals specifically with multiple choice questions of the one-from-five type and a number of hints on evaluation of such questions are put forth. (EB)

9452 **Marshall, W.A.** *Human growth and its disorders*. London, Academic Press, 1977. 179p. Engl.

The purpose of this handbook is to give the physician an understanding of the nature, extent, and causes of variation in the physical growth and development of children. Topics covered include methods of studying growth and development, indicators of puberty and sexual maturity, maturity and its measurement, interaction of heredity and environment in relation to growth, hormones in the regulation of growth and development, and the diagnosis and treatment (where appropriate) of growth disorders. As the book was intended for use in the developed countries, there is little more than a mention of the role of nutritional deficiencies in abnormal growth; otherwise, the subject is comprehensively treated in clear, concise, and simple language. (HC-L)

9453 **McLaren, D.S.** *Nutritional ophthalmology*. London, Academic Press, Nutrition: Basic and Applied Science — A Series of Monographs, 1980. 438p. Engl. Refs.

Seventeen years after writing the definitive reference text on nutrition and eye health (Malnutrition and the Eye, 1963), the author has produced an updated and expanded version of the same. Material from both animal studies and clinical experience have been grouped together under the following chapter headings: starvation, vitamin A, vitamins of the B complex, other vitamins, essential elements, proteins and amino acids, carbohydrates, lipids, prenatal influences, dietary toxins, and miscellaneous human eye conditions. Since most of the clinical experiences related are from the developing countries, the book is of particular value to the practicing physician or ophthalmologist in the Third World. (HC-L)

9454 **Morley, D.** *Distance learning for primary health care*. Israel Journal of Medical Sciences (Jerusalem), 17(2/3), Mar 1981, 184-191. Engl. 15 refs.

A training technique called "distance learning", which would be especially useful in developing countries, is described. As part of this technique, a small group led by a teacher would be involved in preparing distance learning material appropriate for health teams offering primary care in villages and slums. As a result of this training, the teams would be better prepared to tackle the major health problems of the communities they serve. In children, these problems are malnutrition, diarrhea, and respiratory diseases, which together account for half the number of childhood deaths. (Modified journal abstract)

9455 **National Council for International Health, Washington, D.C.** *New developments in tropical medicine*. Washington, D.C., National Council

for International Health, Jan 1982. 94p. Engl. Refs.

For the benefit of practitioners in the tropics — be they physicians, nurses, or medical assistants — this report presents papers on new practical advances in the following areas: primary health care in the tropics (papers focus on disease prevention and training of primary health care workers, respectively); health problems of refugee populations; parasitic infections (papers cover malaria, schistosomiasis, and intestinal protozoa and helminths, respectively); diarrheal diseases (including a paper on oral rehydration therapy); and tropical medicine in temperate climates. In each section, an attempt has been made to view diseases from both clinical and public health perspectives. (HC-L)

9456 **Peters, W., Gilles, H.M.** *Colour atlas of tropical medicine and parasitology. 2 edition.* London, Wolfe Medical Publications, Wolfe Medical Atlases, No. 17, 1981. 399p. Engl.

This manual of tropical medicine and parasitology, basically a reference to the commoner tropical diseases and a guide to their parasitic origins, epidemiology, clinical features, and pathology, discusses arthropod-borne infections; soil- and snail-mediated helminthiases; infections acquired through the gastrointestinal tract, skin, and mucous membranes; air-borne infections; nutritional disorders; and miscellaneous conditions. There are numerous photographs of the parasites and their vectors; human symptoms; and the results of blood films, cross-sections of infected tissue, and other serological and diagnostic findings, etc. The text is very brief. Fifteen tables give the zoological classification of parasites and vectors. (AF)

9457 **Peterson, D.R., Thomas, D.B.** *Fundamentals of epidemiology.* Lexington, Mass., D.C. Heath, Sep 1978. 97p. Engl.

Designed to serve as a means of self-instruction in the fundamentals of epidemiology, this manual aims to impart knowledge of epidemiology as a discipline of learning and a field of practice, provide experience in applying epidemiological principles to the solution of specific problems, and enhance skill in critically evaluating professional medical literature. After examining, with illustrations, the concepts and terminology used in epidemiology, the book poses a series of 11 problems to be solved by the students before referring to the answers that appear at the end of the exercise. A set of 20 multiple choice examination questions is also included. (HC-L)

9458 **Ritchie, J.A.** African Training and Research Centre for Women, Addis Ababa. *Manual on child development, family life, nutrition.* Addis Ababa, UN, Jan 1978. 209p. Engl.

This 1st volume of the ATRCW manual for trainers covers child development and growth; nutrition, growth, and health; feeding the family; and causes of malnutrition. Instructions for starting a nutrition and family life education programme are given and a number of practical experiences ranging from arm circumference measurements to traditional weaning foods are recounted. Appendices list FAO/WHO energy and nutrient requirements, food composition, and additional reading. Illustrations and statistical data are included. (DP-E)

9459 **Rohde, J.E., Sadjimin, T.** *Teaching epidemiology in developing countries: a field exercise.* International Journal of Epidemiology (Oxford, UK), 9(4), 1980, 369-373. Engl.

After testing in Indonesia, a field exercise demonstrating the principles of a sample survey is described that, in nine steps carried out over 3-4 days, provides reliable data on selected infectious diseases, vital rates, causes of mortality, and other health indicators. Survey design, implementation, analysis, and interpretation are applied in a practical and visible way during the exercise. The resulting data appear to be more reliable than existing data gathered passively through the health services system and provide a useful indicator of present priorities and needed action in the control of infectious diseases. (Modified journal abstract)

9460 **Scotney, N.** *Health education: a manual for medical assistants and other rural health workers. Rev. Ed.* Nairobi, African Medical and Research Foundation, Rural Health Series, No. 3, 1983. 141p. Engl.

Based on the author's teaching and practical experience in East Africa, this illustrated manual is designed to be a practical aid to health centre staff by teaching them to meet difficulties as they arise. The following are among the areas discussed: links between diseases and behaviour, changing health habits, effective communication and interviewing, rural health improvement, opportunities and responsibilities of rural health staff, home visiting for health education, community and group health education, health care facilities, special needs, organizing a health education programme, and evaluation of health education. (EB)

9461 **Smith, W.A.** *Do visual instructions make a difference?* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 14-15. Engl.

This paper describes how a set of symbols intended to teach illiterate rural mothers how to mix and administer a prepackaged oral rehydration solution was developed and tested in Honduras. The results of the tests indicated that visual aids are useful only if they convey the intended message but that care must be taken to ensure that instructions on packages are construed as directions and not merely as decoration. The complementary role that radio can play in this regard, i.e., by directing people to more detailed information elsewhere, is pointed out. (HC-L)

9462 **Thomas, M.** *Illustrated storytelling: adapting to additional methods of communication for community health education.* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 5-7. Engl.

In Guatemala, primary health workers trained local community members to use story-telling to present mes-

sages about water, waste disposal, child care, and food preparation. In order to keep the information presented accurate and consistent, the story-tellers were provided with a set of visual aids comprising posters depicting a family of cartoon characters culturally similar to the villagers. This paper describes the educational approach and how it was implemented and includes two illustrations from the posters. (HC-L)

9463 **Trésarieux, C.** *Prévention des problèmes dentaires. (Prevention of dental problems).* Développement et Santé (Paris), (37), Feb 1982, 20-24. Fren.

This paper reviews the various elements involved in the prevention of dental caries, peridontal disease and gingivitis, and certain orthodontic problems. Advice on proper nutrition, brushing technique, care of the gums, etc. forms the basis of dental education intended primarily for African children. (HC-L)

9464 **Vickers, J.** *UNICEF's development education kits.* Appropriate Technology for Health Newsletter (Geneva), (10), Dec 1981, 19-20. Engl.

During the 1960s, educational materials for developing countries tended to be produced centrally and disseminated outwards, with considerable risk to cultural relevance. Today, several international agencies are producing kits for making and disseminating teaching and communications tools, or prototype materials, that can be adapted at the regional or local level to the requirements of the country or group concerned. Now that the value of prototype materials has been generally acknowledged, concern is being voiced for the professionalism of the adaptation. In this paper, international organizations are urged to provide the necessary resources, in terms of finance and expertise, for adaptation so that prototype materials may achieve their full potential. (HC-L)

9465 **Western, K.A.** *Epidemiologic surveillance after natural disaster.* Washington, D.C., Pan American Health Organization, Scientific Publication No. 420, 1982. 94p. Engl. 59 refs.

Also published in Spanish as *Vigilancia epidemiológica con posterioridad a los desastres naturales*; see also entry 8760 (volume 13).

This manual is a companion piece to the guide Emergency Health Management after Natural Disaster (PAHO Scientific Publication No. 407, 1981) and provides technical guidelines on specific chapters contained in the parent guide. The parent guide provides an overview intended to be of use to policy makers and the administrators responsible for health service delivery after the occurrence of disaster in developing nations. This manual is directed to an audience comprising the senior technical officers involved in postdisaster health relief. Guidelines are also given for intersectoral cooperation. Although the general principles are relevant throughout the developing world, special emphasis is given to Latin America and the Caribbean. (DP-E)

9466 **WHO, Geneva.** *Guidelines for training community health workers in nutrition.* Geneva, WHO, WHO Offset Publication, No. 59, 1981. 153p. Engl.

A community health worker training programme should aim to enable the student to perform a limited number of specific tasks for the improvement of health and nutrition; to elicit maximum participation by the trainees in the learning process; to include skills not directly related to the subject matter but necessary to its propagation, e.g., problem-solving, social animation, etc.; and to be completed in the time required by the student, not the instructor. This monograph contains guidelines to devising such a programme, a number of modules including illustrations and exercises that can be adopted or adapted for a programme, and advice regarding teaching methods and aids. Topics covered by the modules include growth monitoring, breast-feeding, diets for young children, maternal nutrition, common nutritional deficiencies, diarrhea, nutrition, and infections. (HC-L)

IV.9.2 Family Planning and Midwifery

9467 **Keating, R.** *Grass roots radio; a manual for fieldworkers in family planning and other areas of social and economic development.* London, International Planned Parenthood Federation, 1977. 65p. Engl. Refs.

The purpose of this manual is to teach and analyze certain basic elements of radio production and writing, which, if skillfully applied, will enable workers in the field of family planning to explain to listeners, via the transmitters of their local radio stations, the purpose and practice of family planning in relation to the communities they serve. Useful as a source book in training courses for non-professional broadcasters, it concentrates mainly on field interviewing, explaining and illustrating the techniques of interviewing and of personal appearances before the microphone. The methods described can be equally useful to workers in other fields of social and economic development. The appendix contains seven case studies in developing countries and a suggested reading list. (EB)

9468 **Kleinman, R.L.** *Family planning handbook for midwives and nurses. 2 edition.* London, International Planned Parenthood Federation, 1976. 66p. Engl.

Also available in French and Spanish.

Written to help midwives and nurses in developing countries to play their important role in family planning, this illustrated booklet provides general information on contraceptive techniques and discusses the concept of community-based distribution programmes whereby family planning information and contraceptive supplies are distributed directly to the users. The types of family planning described include the rhythm method, chemical and mechanical methods, intrauterine devices, hormonal contraceptives, sterilization, and abortion. A list of IPPF member organizations is included. (EB)

9469 **UN, New York.** ***Identifying social welfare strategies related to family planning motivation; a research tool addressed to social welfare agencies.*** New York, UN, n.d. 44p. Engl. Refs.

In rural family planning programmes, as in any development activity dependent upon behaviour modification, health workers must understand people's motivations before they can initiate effective programmes involving social change. This book lists 20 such motivations related to childbearing and family size that have been identified by researchers around the world. Family planning workers are asked to decide whether or not these attitudes or beliefs are common in their communities and, if so, what steps have been taken to deal with them; the answers are to be recorded in a response booklet and returned to the UN. It is hoped that analysis of these responses will help develop strategies for overcoming some of these cultural obstacles to family planning. (DP-E)

9470 **Walsh, B.E.** ***Guide to the care of the low-birth-weight infant.*** New Delhi, WHO, WHO Regional Publications South-East Asia Series, No. 10, 1981. 160p. Engl.

This handbook for nurses and health workers, prepared originally for use in Rajasthan, India, describes the high-risk pregnancy and the high-risk infant, the low-birth-weight infant, the administration and organization of newborn services physical facilities for the care of low-birth-weight infants, principles of management and care, common complications of low-birth-weight infants, other complications, and procedures. A glossary and a list of additional readings are included. (DP-E)

V Formal Evaluative Studies

V.1 Health Workers

See also: 9441, 9725.

9471 **Amonoo-Lartson, R., de Vries, J.A.** *Patient care evaluation in a primary health programme: the use of tracer conditions as a simple and appropriate technology in health care delivery.* Social Science and Medicine (Aberdeen, UK), 15A(5), Sep 1981, 735-741. Engl.

If community-based health care programmes are to be beneficial, simple but effective evaluative procedures using readily available epidemiological data must be designed and used. This article reports the use of tracer conditions (cough, diarrhea, and fever) to evaluate the quality of care provided by community clinic attendants in rural Ghana. The results of a survey of 290 tracer observations among 200 patients are discussed and presented as statistical data. The evaluation procedure was thought to be feasible and could provide an immediate and useful feedback that might be used to improve health provider performance through training programmes and general management of community clinics. (Modified journal abstract)

9472 **Kumar, S., Vibha, Tiwari, I.C., Sharma, D.** *Qualitative evaluation of maternal care in rural areas of Varanasi.* Indian Journal of Medical Research (New Delhi), 73(4), Apr 1981, 590-593. Engl.

Eighteen auxiliary nurse-midwives in three primary health centres in Varanasi, India, were observed 3-5 times each to evaluate them in terms of quality of care. Their performances in the areas of history-taking, physical and obstetric examinations, antenatal advice, asepsis during delivery, immediate newborn care, and postnatal examination of the mother were found to be generally unsatifactory; the results are discussed and presented as statistical data. It is suggested that lack of supervision and appropriate equipment contributed greatly to the poor quality of care. (DP-E)

9473 **Malouf, M.I.** *Performance of clinical officers in the outpatient department of a district hospital in Kenya.* East African Medical Journal (Nairobi), 58(8), Aug 1981, 557-569. Engl. 18 refs.

The performance of clinical officers acting as diagnosticians at the 1st level of outpatient care in a district hospital in Kenya was assessed by a method of audit and the implicit judgments of medical practitioners familiar with the problems encountered in this situation. The 3-phase study showed that procedural deficiencies such as the inadequacy of clinical records, consultation time, and laboratory back-up, adversely influenced the quality of care. Nevertheless, 75% of the care dispensed was judged acceptable; given available resources, the clinical officers render adequate care to the majority of their patients. A lack of expertise in dealing with serious illness or problematic patients was observed. (Modified journal abstract)

9474 **Stubbe, H.G.** *Family physician: a new specialty.* Boletín de la Asociación Médica de Puerto Rico (San Juan), 74(3), Mar 1982, 73-75. Engl.

In August of 1979 a questionnaire was mailed to the faculty of the University of Puerto Rico School of Medicine in order to evaluate that group's knowledge of and attitudes towards family medicine. The results are discussed and presented as statistical data. The survey indicated a lack of knowledge and/or a negative attitude towards the family physician's involvement in anything except primary care. The author suggests that the modern practitioner of family medicine is equipped to provide continuing health care to the entire family and coordinate the family's health needs at every level; steps should be taken to make other physicians aware of this. (DP-E)

V.2 Organization and Administration

See also: 9361, 9411, 9535, 9579.

9475 **Abcede, J.C.** *Spirits in the water-pipe.* World Health (Geneva), Dec 1981, 26-29. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

In 1978, Papua New Guinea's department of health, with WHO and UNICEF support, started a 3-year project to provide 60 water supply systems and sanitary latrines in each of the four provinces. To overcome local taboos, the 1st water systems were constructed in village schoolgrounds and, after parents saw the benefits of fresh water supplies, requests for additional construction reached 50-70 per month. In the 1st 2 years, 104 water systems serving 42 000 people and 350 latrines were constructed. Gravity-fed water systems are recommended as less susceptible to breakdown than those requiring pumps. (DP-E)

9476 **Barzgar, M.A., Ourshano, S., Amini, J.N.** *Evaluation of the effectiveness of oral rehydration in acute diarrhoea of children under three years of age in West Azerbaijan, Iran.* Journal of Tropical Pediatrics (London), 26(6), Dec 1980, 217-222. Engl.

Results of this 1977 study in two Iranian villages revealed that oral rehydration of children aged less than 3 years with mild to moderate diarrhea using the WHO-recommended formula produced is feasible at the village level in that country. The WHO formula produced speedier rehydration, reduced the need for hospital referral, lowered mortality, and still had a marked effect on nutritional status 6 months later; its use is strongly recommended. Statistical data are included. (DP-E)

9477 **Basu, R.** *Use of emergency room facilities in a rural area: a spatial analysis.* Social Science and Medicine (Aberdeen, UK), 16(1), 1982, 75-84. Engl. 11 refs.

This paper is a spatial analysis of travel patterns to emergency room (ER) facilities in the USA; it aims to determine the extent to which the residents of a rural region use the ER facilities of nearby small towns and to explore variables affecting their choice of facility and their travel pattern. The hospitals of a small town in western New York near the Pennsylvania line that receive sufficient numbers of ER patients from two Pennsylvania counties besides their local and other New York State patients provide the setting. Statistical data are included. (Modified journal abstract)

9478 **Beverly, J.E.** *WASH Project: three year contract summary.* Arlington, Va., Water and Sanitation for Health Project, WASH Progress Report, No. 6, 31 Oct 1983. Engl.

This 6th progress report not only outlines the achievements of the WASH project during its 1st 3 years of operation but also includes the findings of the 1st formal project evaluation. A large table analyzes the work content of project assignments and orders of technical direction, summaries of which (as well as summaries of some shorter assignments) are included in separate sections. An appendix contains a list of WASH publications. (DP-E)

9479 **Bhandari, B., Nagori, G., Mandowara, S.L.** *Nutritional and immunization status of children in an ICDS block.* Indian Pediatrics (Calcutta, India), 18(3), Mar 1981, 187-191. Engl.

The government of India is promoting an integrated child development services scheme through the establishment of *anganwade* health centres in rural villages. In order to evaluate the scheme, baseline and follow-up studies were conducted one year apart on 420 children from 250 families served by 10 *anganwadi* centres in Garhi, Rajasthan. In spite of the fact that the services had been in operation for 42 months, the results were disappointing: 36.9% and 39.2% of the children were classified as adequately nourished in the baseline and follow-up surveys, respectively; and 44.29% and 52.44% had received both doses of DPT. Four tables of data from the surveys are included. (HC-L)

9480 **Birch, J.A.** *General practitioner obstetrics in a small rural hospital.* New Zealand Medical Journal (Wellington), 93(678), Feb 1981, 126-129. Engl.

The outcome of 298 pregnancies supervised by the general practitioners in the Hokianga special medical service (New Zealand) from January 1974-December 1979 is reported. Of those delivered at the Hokianga Hospital obstetric unit, 90% were normal deliveries, a higher than usual proportion. The transfer rates for women in labour and for neonates were acceptably low. Perinatal mortality was 10:1 000 live births. It is concluded that, in addition to having a high patient acceptance, general practice obstetrics can provide a very high standard of care. Some of the reasons for this are discussed. Statistical data are included. (Modified journal abstract)

9481 **Costa, H., de Araujo, G., de Lauture, H., Wone, I.** *Première évaluation d'une action de soins de santé primaires au Sénégal oriental. (Initial evaluation of primary health care activities in eastern Senegal).* Dakar Médicale (Dakar), 27(1), 1982, 29-48. Fren.

Reporting on the results of a primary health care campaign carried out in East Senegal during April 1976-June 1978, this study presents an evaluation of the 1st phase, which covered 18 villages in an underserved region. With the use of two diagrams and nine tables, the medico-sanitary, psychosociological, and financial impacts are discussed at length. It was found that while the impacts are generally positive, they vary from village to village despite the homogeneous population. Comparison is made with a similar study in the Guinguinéo region. The paper concludes that, despite its relatively short time-frame, the study illustrated the weight of financial constraints and the need to include such campaigns in a larger development context. (EB)

9482 **Cvjetanovic, B., Chen, L.C., Kroonal, R., Rohde, C., Sunkind, R.** *Measuring and evaluating diarrhea and malabsorption in association with village water supply and sanitation; a review of the food wastage/sanitation cost benefit methodology project (Guatemala).* Arlington, Va., Water and Sanitation for Health Project, WASH Technical Report No. 12, Dec 1981. 36p. Engl.

A 4-year study of the effect of improved water supply, sanitation, and health education on morbidity due to diarrheal diseases was conducted in an experimental and a control village in Guatemala. Conflicting interpretation of the study findings prompted US AID to convene an expert review panel to resolve the discrepancies between the two analyses. The panel's findings constitute a critique of the study methodology and they are presented in this document along with descriptions of the project, data collection procedures, and data analysis and results. (HC-L)

9483 **Dhadphale, M., Ellison, R.H., Griffin, L.** *Frequency of mental disorders among outpatients at a rural district hospital in Kenya.* Central African Journal of Medicine (Harare), 28(4), Apr 1982, 391-396. Engl.

The frequency of conspicuous psychiatry morbidity (CPM) among outpatients attending a rural district hospital in Kenya was assessed using a locally validated and modified version of the Self Reporting Questionnaire, the advantages of which are discussed. Anxiety, depression, alcoholism, and manic depressive psychosis were the most common disorder seen. CPM patients were found to have longer bouts of illness and were not receiving appropriate treatment. Clinical officers should be trained to identify these patients and treat them on an outpatient basis. Statistical data are included. (Modified journal abstract)

9484 **Díaz del Castillo, E.** *Utilidad de los servicios de cuidados intensivos neonatales. (Usefulness of neonatal intensive care services).* Gaceta Médica de México (Mexico City), 116(12), Dec 1980, 541-548. Span. 9 refs.

The department of neonatology of the pediatric hospital of the *Centro Médico Nacional*, Mexico, has been in operation since 1965. In 12 tables, this paper presents data for the years 1965-1979 on the department's productivity, as indicated by the number of admissions per year, the occupancy rate, and the average length of stay; the general mortality over the years; and the mortality due to certain serious conditions requiring early, sustained, and efficient intervention. It also compares the death rate found in this service with those of neonatal services in Canada, the USA, Switzerland, and Nigeria. (HC-L)

9485 **Giel, R., d'Arrigo Bunnello, E., Climent, C.E., Elbakim, A.S., Ibrahim, H.H.** *Classification of psychiatric disorder; a reliability study in the WHO Collaborative Study on Strategies for Extending Mental Health Care.* Acta Psychiatrica Scandinavica (Copenhagen), 63(1), 1981, 61-74. Engl.

A total of 26 psychiatrists and other mental health workers from Colombia, Brazil, Sudan, Egypt, India, and the Philippines tried to reach agreement on the classification of 10 case histories, using the International Classification of Diseases (8th revision). The exercise was part of the WHO Collaborative Study on Strategies for Extending Mental Health Care. Conventions, mistakes, differences of opinion, and a lack of established rules are discussed as causes of disagreement. (Modified journal abstract)

9486 **Greenland, S., Neutra, R.R., Galán Morera, R.** *Attempt at measuring the impact of sanitation and economics on health: a reanalysis of the Colombian National Health Survey.* Public Health (London), 95(5), May 1981, 264-272. Engl. 15 refs.

In 1981, the 1968 Colombian National Health Survey was reanalyzed in order to examine the impact of sanitation on self-reported illness and physician contact while controlling for socioeconomic factors. The results are discussed and presented as statistical data. The findings indicate that environmental factors (running water, toilet facilities, and housing) appeared to have no significant residual effects after adjustment for urban residence, family income, and education of head of household. These results, at variance with those of many previous studies, suggest that sanitation programmes for developing countries will be more effective if they are accompanied by economic growth. (Modified journal abstract)

9487 **Halperin, D.C., Garfield, R.** *Developments in health care in Nicaragua.* New England Journal of Medicine (Boston, Mass.), 307(6), 5 Aug 1982, 388-392. Engl.

Two USA physicians report on progress made in health care in Nicaragua since the revolution in July 1979. Before that event, 90% of health care resources had been devoted to 10% of the population: measles, malaria, tuberculosis, and malnutrition were endemic, infant mortality was high, and life expectancy was low. Public health measures have been instituted, health care centres opened, and education and vaccination emphasized. Rehydration centres have been established to combat deadly infant diarrhea and hospital construction and admissions are on the rise. The heavy dependence on international aid is noted and a 10-year programme begun in 1981 is briefly described. (DP-E)

9488 **Hedman, P., Brohult, J., Forsland, J., Sirleaf, V., Bengtsson, E.** *Pocket of controlled malaria in a holdendemic (sic) region of West-Africa.* In Gebhart, J.A., Cerny, K., eds., Symposia o Problematice Zdravotnictvi ve Vztahu k Rozvojovym Zemin, Prague, Univerzita Karlova, 1981, 115-128. Engl. 9 refs.

For complete document see entry 9253.

Malaria control measures including indoor spraying, antilarvae measures, chemoprophylaxis and free medical services for early diagnosis and treatment, have been in place in the mining town of Yekepa, Nimba County, Liberia, since 1963. In 1976, a survey was carried out involving spleen and parasite assessment of 103 Yekepa children aged 2-10 years and 203 children from outside of Yekepa as well as an entomological survey. The spleen and parasite rates for the Yekepa children were 10.7% and 12.6%, respectively, and for the control children, 95% and 67%. It is therefore concluded that the malaria programme is, on the whole, working despite constant movements in and out of Yekepa. Details of the programme's history, cost, and operation and the results of the entomological survey are included. (HC-L)

9489 **Holden, C.** *Health care in the Soviet Union.* Science (Washington, D.C.), 213(4512), 4 Sep 1981, 1090-1092. Engl.

Basing her statements on an analysis of hard-to-obtain Soviet statistics and on the report of William Knaus, a US physician expressing his views in the book Inside Russian Medicine, the author maintains that rising in-

fant mortality in the USSR (now at 35.6:1 000 live births, compared to less than 13:1 000 in the USA and Europe) reflects the inadequacies of a health care system that in many areas is primitive and ill-equipped. The author attributes this in part to the fact that the Russians do not share the usual Western reverence for the medical profession because in their country it is dominated by women, especially at the primary level. Some of the more flagrant hygienic abuses are outlined and the serious problem of alcoholism in the USSR is discussed. (DP-E)

9490 **Hunter, J.M.** *Progress and concerns in the World Health Organization onchocerciasis control programme in West Africa.* Social Science and Medicine (Aberdeen, UK), 15D(2), May 1981, 261-275. Engl. 90 refs.

In 1975, at the request of seven African countries (Niger, Benin, Ghana, Upper Volta, Ivory Coast, Mali, and Togo), WHO began a 20-year larviciding programme to control the blackfly vector of onchocerciasis and permit economic rehabilitation of the abandoned lowlands. The programme has so far met with substantial success, but annual invasions of infective flies from outside the control area have forced it to expand its target area at enormous cost and diminishing return. This paper describes the programme methods, cost, and achievements and raises such disturbing issues as: how far spraying should be extended and how long it should continue; whether the economic return, i.e. development of the lowlands, justifies the cost; possible insecticide-resistance in flies; and the impact of long-term spraying on the environment. (HC-L)

9491 **José, N.K., Temporini, E.R.** *Avaliação dos critérios de triagem visual de escolares de primeira série do primeiro grau. (Evaluation of visual screening criteria for children entering elementary schools).* Revista de Saúde Pública (São Paulo, Brazil), 14(2), Jun 1980, 205-214. Portuguese. 18 refs.

The State of São Paulo, Brazil, has developed a programme whereby teachers are trained to screen schoolchildren for visual problems using the Snellen optical chart and other criteria. Retesting of 411 children by a team of specialists was done in order to analyze the number of false positives and false negatives identified by the teachers and to determine the most appropriate cut-off point (0.9, 0.8, 0.7, 0.6, or 0.5) for referral. This paper presents and analyzes the evaluation results. Given that the higher cut-off point results in a higher rate of false positives (and, hence, strain on scarce ophthalmic resources) and the lower cut-off point results in a greater number of false negatives or missed cases, 0.7 with a false positive rate of 3.4% and a false negative rate of 2.67% was deemed an appropriate compromise under present resource conditions. (HC-L)

9492 **Krishnaswami, K.V., Somasundaram, P.R., Tripathy, S.P., Vaidyanathan, R., Radhakrishna, S.** *Randomised study of two policies for managing default in out-patients collecting supplies of drugs for pulmonary tuberculosis in a large city in South Africa.* Tubercle (Edinburgh), 62(2), Jun 1981, 103-112. Engl. 10 refs.

A randomized controlled study of 150 outpatients with smear-negative pulmonary tuberculosis was undertaken to compare two policies of default management involving the monthly collection of self-administered drug supplies. In case of default, members of the regular group received reminder letters after 4 days and visits from health visitors after 7, while members of the intensive group were visited after 4, 7, 30, and 60 days, if necessary. The findings are discussed and presented as statistical data. The mean number of drug collections during the year was significantly higher in the intensive group, with 69% (compared to 52%) making 12 out of 15 collections. (DP-E)

9493 **Kroeger, A.** *Participatory evaluation of primary health care programmes: an experience with four Indian populations in Ecuador.* Tropical Doctor (London), 12(1), Jan 1982, 38-43. Engl. 11 refs.

A seminar with primary health care workers from four Indian groups in Ecuador serves as an example of a methodology for the participatory evaluation of primary health care (PHC) programmes. Discussions in small groups, interpretation of visual aids derived from research data on health care utilization, and practical evaluation exercises helped participants understand the opportunities and limitations that exist in the PHC schemes. A final discussion with health officials was important for mutual respect and understanding. The need for the involvement of the community and PHC workers in the evaluation of their own programmes is stressed. (Modified journal abstract)

9494 **Lanas Z., F., Olivs, M.E., Pantoja, M., Salvatici S., R., Opazo A., J.A.** *Programa de prevención de recidivas de la enfermedad reumática (IX región, Chile). (Programme for the prevention of rheumatic disease recurrences (Region IX, Chile)).* Revista Médica de Chile (Santiago), 109(8), Aug 1981, 763-768. Span. 16 refs.
Undécimo Congreso Interamericano de Cardiología, San Juan, Puerto Rico, Sep 1980.

In 1975, a programme to prevent recurrences of rheumatic fever was started in 25 Chilean hospitals and outpatient clinics. Initial diagnosis, penicillin, education, and tracing of missing subjects are provided at the local level, with technical back-up from a cardiology hospital and programme coordination by a regional committee. From 1975-1979, 423 patients have participated in this programme, of whom 50% were schoolchildren and 30% from rural areas. While prophylaxis was judged adequate in 70% of this group, treatment defaulters tended to be older subjects from rural areas. Statistical data are included. (Modified journal abstract)

9495 **Lee, R.P.** *Comparative studies of health care problems.* Social Science and Medicine (Aberdeen, UK), 16(6), 1982, 629-642. Engl. 50 refs.
Seventh International Conference on Social Sci-

ence and Medicine, Leeuwenhorst, Netherlands, 22-26 Jun 1981.

This paper reveals the dynamics of hierarchical medical pluralism through a comparative analysis of the health care systems in three Chinese societies (the People's Republic of China, Taiwan, and Hong Kong). It is argued that the hierarchical relationships among medical traditions within a national society should be studied in terms of structural superiority (power, prestige, and wealth) and functional strength (distribution and utilization) and should be understood in the context of modernization. Scientific biomedicine has become structurally superior to other forms but is not always functionally strong. The trend toward absorption of traditional systems by modern medicine is considered. (Modified journal abstract)

9496 **Lavetti, A., Garbellini, D.** *Leprosy in the Cape Verde Islands.* Leprosy Review (London), 52(4), 1981, 337-348. Engl. 19 refs.

After a general profile of the country, information is given concerning the history of leprosy in the Cape Verde Islands. Treatment has been supplied since 1952 and a National Leprosy Control Programme was set up in 1978 after formation of the new Republic of Cape Verde. Since then, contact surveys, notifications, and voluntary presentations have produced 89% of new cases and the authors suggest that these methods, along with public education and the training of health workers, constitute the best strategy to follow. It is felt that emigration has had a significant impact on the country's disease patterns. Statistical data are included. (DP-E)

9497 **López-Acuña, D.** *Health services in Mexico.* Journal of Public Health Policy (South Burlington, Vt.), 1(1), Mar 1980, 83-95. Engl. 22 refs.

An overview of the Mexican health care system is presented through analysis of the structure of the available services, their performance, their coverage, and the degree to which the health needs of the population are met. Problems inherent in the system include the lack of manpower planning, the maldistribution of resources, and insufficient financial resources. A better alternative would be the concentration of the multiplicity of existing services into a coordinated national health service. (DP-E)

9498 **Maclaren, H., Lennox, C.** *Child health clinics in Enga province.* Papua New Guinea Medical Journal (Port Moresby), 24(2), Jun 1981, 99-102. Engl.

This study of 16 maternal child health clinics in Enga province, Papua New Guinea, examined clinic management, statistical reporting, immunization adequacy, and attitudes of attending mothers, which were determined by means of a questionnaire. The accuracy of statistical reporting and the immunization coverage achieved were found to be poor and many clinics were poorly organized. Education and advice to individual mothers and to groups were often lacking. Despite these deficiencies, the clinics were evidently important social events where a significant amount of health education takes place; mothers themselves thought the clinics worthwhile and beneficial. Statistical data are included. (Modified journal abstract)

9499 **Maksimova, N.M., Sukhorukova, N.I., Basova, N.N., Meshkova, M.I., Medvedeva, N.S.** *Dalnejsee sovershenstvovanie shemy immunizacii detej protiv difterii i stolbnjaka. (Further improvement of the scheme for immunization of children against diphtheria and tetanus).* Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii (Moscow), (4), 1981, 29-34. Russ.

A study of revaccination schedules for diphtheria and tetanus was carried out on 800 Soviet children aged 6-9 years and 11-14 years. In the 1st age group, immunity to the above-mentioned infections was determined after the primary immunization, and in the 2nd age group after the 1st revaccination made at an age indicated in the schedule. Since high levels of immunity in both diseases were shown to persist for 6-7 years, it is suggested that intervals between revaccinations be increased and that children be vaccinated at the ages of 9 (instead of 6) and 16 (instead of 11) years. Statistical data are included. (Modified journal abstract)

9500 **Maslauskene, T.P., Butkene, P.P.** *Opyt primenenija izmenennoj metodiki revakcinacii BCZ y skol'nikov. (Use of a modified BCG revaccination method in schoolchildren).* Problemy Tuberkuleza (Moscow), 10, 1980, 7-9. Russ.

The comparison of a group of 720 Lithuanian children revaccinated with BCG vaccine at the ages of 6.5 and 15 years with a control group of schoolchildren revaccinated according to the usual pattern (3 times) did not show any significant differences in sensitivity to tuberculin, the character of local postvaccination reaction, the frequency of cicatrization, or the frequency and severity of infection. The authors believe that two revaccinations are sufficient in those areas where the frequency of tuberculosis is low. (DP-E)

9501 **McLachlan, G.** *Information systems for health services.* Copenhagen, WHO, Public Health In Europe, No. 13, 1980. 132p. Engl. Refs.

In September 1977, the 27th session of the WHO Regional Committee for Europe discussed national health information systems for health services, in particular their policies, performance, and shortcomings. Interactions between national and WHO health information systems are reported and attempts to improve the systems in the Federal Republic of Germany, the USSR, and Scotland are reviewed. Technical and other problems — data security and protection of data collection and criteria, effective planning and the establishment of computerized health information systems, true morbidity and use of health care services, liaison of environmental exposure data with morbidity data, etc., — are examined. Some illustrations help explain the text. (AF)

9502 **McNulty, D.** *Uitdagings verbonde aan die lewering van primêre gesondheidsorgdienste in artikel 30-gebiede. (Challenge connected to the*

delivery of primary health care in article 30 areas). Curationis (Pretoria, South Africa), 4(3), Dec 1981, 22-25. Afrikaans.

In 134 districts of South Africa, known as Article 30 areas, the Department of Health, Welfare and Pensions has been developing and providing primary health care services since 1975. This article outlines the services provided and some of the complex problems encountered. The lack of demographic and epidemiological data is a major hindrance. Mobile health units are used to reach immigrant farm workers and their families in remote areas. This involves careful selection of equipment, techniques, and procedures on the part of the nurses. Their important and versatile role in meeting promotive, preventive, curative, and rehabilitative health needs is discussed. (Modified journal abstract)

9503 **Morgan, P., Kaplan, J.P., Miller, G.J., Hull, B., Ashcroft, M.T.** *Serological evaluation of an immunization programme in Salt Cay, Turks, and Caicos Islands*. West Indian Medical Journal (Kingston, Jamaica), 30(2), 1981, 68-71. Engl. Refs.

A serological survey in Salt Cay, Turks, and Caicos Islands, British West Indies, suggested that immunization against poliomyelitis carried out since 1971 had been unexpectedly ineffective. In addition, immunity as judged by antitoxin levels was satisfactory for tetanus but poor for diphtheria. The value of serological studies in the evaluation of immunization programmes is demonstrated. Effective evaluation of a vaccination programme must involve accurate vaccination records and continuous surveillance of disease incidence, cold chain adequacy, and vaccine delivery to susceptible groups. Statistical data are included. (Modified journal abstract)

9504 **Mossop, R.T.** *Are we winning?* Central African Journal of Medicine (Harare), 28(5), May 1982, 120-122. Engl.

A formidable array of relevant information is necessary for an assessment of community health and the effects of health programmes on it. Such an assessment is attempted by the author for a rural district of Zimbabwe. The best indicators proved to be antenatal attendance, perinatal and infant mortality, toddler mortality, and family size. It is noted that such information is normally considered only on a national level but can be useful for local clinics in judging the impact of their promotive efforts. Some statistical data are included. (DP-E)

9505 **Mönckeberg, F.** *Treatment of severe malnutrition during the first year of life*. Progress in Clinical and Biological Research (New York), 67, 1981, 141-149. Engl.

In April 1975, a 30-bed nutrition rehabilitation centre was established at the University of Chile's institute of nutrition and food technology to provide feeding equivalent to 180 calories:kg:day, physical exercise, and psychosensorial and affective stimulation for marasmic infants. Comparison of the 1st 80 patients treated at this centre with 80 children treated by conventional methods revealed a greater weight gain after 4 months (65% versus 10%), lower mortality (0% versus 29%), and a lower daily cost ($6 versus $50) in the former group. On the basis of these results, the programme was extended (and expanded to include nutrition education for families) to the entire country by the Chilean nutrition foundation. Statistical data are included. (DP-E)

9506 **Muller, O.H.** *Belangrike ontwikkelings in gesondheidsdienslewering in die Republiek van Suid-Afrika gedurende die sewentigerjare. (Major developments in health care delivery in the Republic of South Africa during the seventies)*. Curationis (Pretoria, South Africa), 4(3), Dec 1981, 6-9. Afrikaans.

This article looks at some of the major developments that have brought about important changes in the delivery and coordination of health services in South Africa. These include the following: the hospital-centered, community directed health services developed in the national states; the changes to programme-budgeting in which the priority areas were highlighted; the formal structure for health services coordination and development of national health policy provided by the 1977 Health Act 63; the creation of the Department of Health, Welfare and Pensions by rationalization in the civil service; and the Health Services Facilities Plan, announced in 1980, which seeks to develop provision of basic health needs, health education, primary health care, and community, regional, and academic hospitals. (Modified journal abstract)

9507 **Mustafa, M.A., Khan, M.U., Haq, J.A.** *Single dose regime of mebendazole in the treatment of polyparasitism in children*. Journal of Tropical Medicine and Hygiene (London), 84(4), Aug 1981, 159-160. Engl. 9 refs.

The recommended dosage of the broad spectrum anthelminthic, mebendazole, is 100 mg twice daily for 3 days, a relatively costly and inconvenient schedule. In a clinic in Dacca, Bangladesh, 52 children with ascaris infections were administered a single dose of 200 mg mebendazole and their stools examined for worms and ova on the 10th, 20th, and 30th days following treatment. By the end of the month, the cure rates for ascaris and trichuris were 100% and 92.85%, respectively, with no side effects observed. The single dose schedule is therefore recommended for both routine and mass treatment. (HC-L)

9508 **Neale, J.T.** *Survey in Soweto (south western township) on the available health services*. Curationis (Pretoria, South Africa), 4(2), Sep 1981, 45-48. Engl. 9 refs.

This article presents the author's overall view of health services in Soweto (1980 population 800 000) using data collected by telephone and personal interviews with administrators of local medical and social services. Environmental, community, and socioeconomic aspects of the region are presented. These areas are briefly considered: social problems associated with liquor consumption, nutritional status of infants and children, birthrates, immunization, communicable disease control, re-

habilitation of the handicapped, veterinary services, voluntary health support services, health education, and mental health services. The author enlarges on curative services, services for the aged, and future projections and puts forth a number of suggestions for improvement. (EB)

9509 **Nsanzumuhire, H., Alusch, J.A., Karuga, W.K., Edwards, E.A., Stott, H.** *Third study of case-finding methods for pulmonary tuberculosis in Kenya, including the use of community leaders.* Tubercle (Edinburgh), 62(2), Jun 1981, 79-94. Engl. 15 refs.

The following methods of identifying tuberculosis suspects were investigated in the Machakos district of Kenya: 3-monthly interrogation of village elders; single interrogation of household heads; identification of suspects among outpatients attending local health units; and examination of registered tuberculosis patients and their contacts. This paper describes the various methods and the relative merits of each. The measures deemed most promising were the interrogation and reinterrogation of elders combined with initial and repeat bacteriological examination of the suspects named by them; sputum examination of registered pulmonary tuberculosis patients, and the examination of symptomatic outpatients. Single interrogation of household head, while yielding a large percentage of cases, is too laborious and operationally impracticable for use in routine case-finding in developing countries. (HC-L)

9510 **Park, C.K., Yeon, H.C.** *Recent developments in the health care system of Korea.* International Social Security Review (Geneva), 34(2), 1981, 151-167. Engl.

This paper describes two major developments in the Korean health sector since the start of the 5th Five Year Plan in 1977: a new medical insurance programme that compulsorily extends the requirements for firms with at least 100 workers to provide medical coverage and the setting-up of pilot low-cost health delivery demonstration projects in three remote rural communities. These initiatives are essentially attacking the issues of the uncoordinated and inequitable provision of health care from two angles. The extension of health insurance involves an increase in government control in this area. The Community Primary Health Care Demonstration Project is developing methods to provide basic appropriate curative and preventive care at low cost for rural people. The project is being evaluated with regard to such measures as coverage, use, referral rates, and costs to the government and users. Statistical data are included. (Modified journal abstract)

9511 **Qureshi, M.A., Kharbanda, V.P.** *Comparative study of health delivery systems of India and China.* Health and Population — Perspectives and Issues (New Delhi), 3(3), Jul-Sep 1980, 187-203. Engl. 15 refs.

The development of health care systems in India and the People's Republic of China is compared. India has stressed the adoption and expansion of the modern Western type of medical care with little regard to indigenous health systems or to the basic health needs (and appropriate means of delivery) of the majority. China has placed far greater emphasis on coordinating the development of modern and traditional systems and introducing barefoot doctors as basic health workers. This approach has met with success but not without some costs in terms of damage to the medical professionals and some distrust on the part of the peasants whose cooperation was forced. The Chinese approach, with some modifications, is undoubtedly superior. (Modified journal abstract)

9512 **Ratanabanangkoon, K., Kanbamaat, C., Jumnanvat, C.** *Time-motion study in pediatric outpatient service.* Journal of the Medical Association of Thailand (Bangkok), 65(2), Feb 1982, 72-78. Engl. 11 refs.

A time-motion study was carried out on 225 newly-registered, 450 2nd-time attenders, and 325 follow-up pediatric patients at the general pediatric outpatient clinic in Ramithibodi Hospital, Bangkok, Thailand. The results, which are discussed and presented as statistical data, revealed that the total mean visit time was 221.33, 179.13, and 175.57 minutes, respectively, for these types of patients, although the time spent with a physician averaged only 8 minutes per patient for the group as a whole. It is suggested that the health care process could be made more efficient by increasing the number of personnel on duty during clinic hours, training auxiliaries to assist with routine work, and opening a separate registration office and pharmacy. (DP-E)

9513 **Ricafia, C.** *Two models on primary health care approach of region VII.* Newsette (Manila), 21(1), Jan-Mar 1981, 17-18. Engl.

Through the years the government of the Philippines has channeled resources towards the improvement of health services, yet 33% of the rural population still remains unserved or underserved. Two successful models of the primary health care approach are presented as examples of what can be accomplished. In one, increased income and accessible housing and health services did much to overcome the effects of severe malnutrition, pneumonia, tuberculosis, and dysentery; this model was adopted by 24 villages. In the other, local leaders were encouraged to participate in health care delivery and local volunteers were trained and utilized. (DP-E)

9514 **Roemer, M.I.** *Health care system of Thailand, a case study.* New Delhi, WHO, WHO Regional Publications South-East Asia Series, No. 11, 1981. 87p. Engl.

This WHO report examines the administrative structure of the health services system in Thailand; its economic support; health manpower resources; health centre, hospitals, and other facilities; research knowledge and its dissemination; the organization of preventive services; ambulatory care delivery; hospital organization and services; health care of special populations; regulation of health activities; health planning and policy formulation; and evaluation and potential for improvement. Statistical data and a bibliography are included. (DP-E)

9515 **Ryan, M.** *Plans and problems in the Soviet dental service.* Dental Update (London), 8(6), Sep 1981, 419-421. Engl.

Evidence is cited from *Pravda*, *Meditsinskaya Gazeta*, and the USSR's 1981-1985 five-year plan to demonstrate that the country's dental services are an overlooked and neglected sector of the total health care system. The quality and quantity of treatment, which emphasizes prevention and prosthetics, are discussed with particular reference to incompetence and equipment shortages. As in many nations, there is a considerable discrepancy between what is planned and what is actually achieved. (DP-E)

9516 **Schreck, C.E., Kline, D.L., Chaniotis, B.N., Wilkinson, N., McGovern, T.P.** *Evaluation of personal protection methods against phlebotomine sand flies including vectors of leishmaniasis in Panama.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(5), Sep 1982, 1046-1053. Engl. 19 refs.

Three personal protection methods against phlebotomine sand flies in Panama were evaluated. Skin applications of five selected repellents including deet (N,N-diethyl-m-toluamide) provided a mean coefficient of protection of 99.2% against the attack of at least three sand fly species. Deet-treated net jackets also provided good protection, but an additional application of repellent to the unprotected face was necessary. Permethrin-treated clothing did not provide the protection expected; the application of another repellent to the skin was needed in this case as well. Statistical data are included. (Modified journal abstract)

9517 **Schulpen, T.W.** *Integratie van particuliere en regerings-medische diensten in Tanzania. (Integration of voluntary and governmental medical services in Tanzania).* Tijdscrift voor Sociale Geneeskunde (Oegstgeest, Netherlands), 56(5), 1978, 156-159. Dutch.

Referring to the activities of the Biharramulo District Hospital in the West Lake province of Tanzania, where he worked from 1969-1972, the author looks at some aspects of the integration of church and governmental medical services. Integrated since 1969 and serving a rural population of 110 000, the hospital had 90 beds in 1972, up from 42 in 1961. The number of visits to the polyclinic rose to 76 000 in 1972 from 32 000 in 1961, while the number of examinations of children increased from 200 in 1961 to 11 400 in 1972. The functions of the district health officer are outlined. (EB)

9518 **Sobhan, C.C.** *Pharmacy in Ethiopia.* East African Medical Journal (Nairobi), 58(11), Nov 1981, 838-842. Engl. 9 refs.

This paper reports on the present organization of pharmaceutical services in Ethiopia and their relevance to medical care. It covers: the education and training of pharmacists; the control, acquisition, production, sale, distribution, and use of drugs; pharmacies, drug shops, and rural medicine vendors; the drug industry; the central medical stores corporation and its distributors; self-medication; and the Ethiopian Pharmaceutical Association. Some statistical data are included. (DP-E)

9519 **Sills, P.O.** *Community involvement — it can be done; a project with the aged in Brakpan.* Curationis (Pretoria, South Africa), 4(3), Dec 1981, 16. Engl.

In 1979, a group of nurses in Brakpan, South Africa, developed a project for the elderly of the community with a view to getting the aged involved in their own health care and thereby increasing their self-reliance and feelings of worth. The organization of the Senior Citizens Action Group and its fund-raising activities are briefly described. The group has, with time, become virtually autonomous; the nurses now act only in an advisory capacity. The result has been positive in terms of the elderly participants' ability to care for themselves. (DP-E)

9520 **Sloan, J.P., Sloan, M.C.** *Assessment of default and non-compliance in tuberculosis control in Pakistan.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 75(5), 1981, 717-718. Engl.

In this study of 300 patients with pulmonary tuberculosis attending a rural hospital in Sind, Pakistan, for a standard 18-month course of treatment, 66% had defaulted by the end of 1 year and about 50% within 3 months of the start of treatment. The same group had a non-compliance rate of 53% for PAS treatment and 60% for isoniazid. Suggestions are made for a change from the established outpatient approach to intermittent high dose chemotherapy administered by health workers in the community. (Modified journal abstract)

9521 **Struba, R.J., Isely, R.B.** *Choice of health status indicators to evaluate water and sanitation projects in north Cameroon: a synthesis of available information.* Arlington, Va., Water and Sanitation for Health Project, WASH Technical Report No. 5, Oct 1981. 29p. Engl. 42 refs.

This paper discusses the desirable qualities of a health status indicator for measuring the health impact of a water and sanitation project on a rural population in Cameroon and examines the feasibility of various direct and indirect measurements of morbidity within the aforementioned context. By reason of their sensitivity to change in environmental health, logistic simplicity, and relatively low cost, the following three indicators were chosen: infant, and possibly child, mortality; infant and child weight-for-height ratios expressed as percents above or below the 60th percentile; and prevalence of dracunculosis (guinea worm infection) in the population at large. (HC-L)

9522 **Tandon, B.N., Ramachandran, K., Bhatnagar, S.** *Integrated child development services in India: objectives, organization and baseline survey of the project population.* Indian Journal of Medical Research (New Delhi), 73(3), Mar 1981, 374-384. Engl. 11 refs.

The Integrated Child Development Service Scheme,

started in 33 project blocks in India in 1975, provides nutrition, health, and educational services to preschool children and women aged 15-45 years through an organized system of *anganwadis* located in each village with a population of 1 000 or more. A baseline survey of 10% of the population of 27 blocks revealed that 66% of households lived below the poverty line, 60% of those surveyed were illiterate, and health services coverage was poor. Information on immunization, nutrition programmes and status, and illness prevalence is discussed and presented as statistical data. (Modified journal abstract)

9523 **Ternak, G., Wolff, M., Britt, D.P.** *Use of the India-ink immuno-reaction for the rapid detection of enteric pathogens in two areas of Nigeria.* Journal of Hygiene (Cambridge, UK), 87(3), 1981, 493-499. Engl.

A 1976 study to assess the reliability of the India ink immunoreaction (IIR) procedure for the detection of carriers of enteric organisms involved 885 patients at a clinic in Kubacha, Nigeria; of these, 544 were examined by the IIR method, 341 by routine culture tests. In a further study, 203 patients at Kaduna General Hospital, in a remote area of northern Nigeria, were tested by both methods in 1978. The results of the investigations are discussed with the use of four tables. It is pointed out that, while the IIR method is simple to perform and requires modest apparatus and reagents, making it useful in remote areas, further studies and comparisons are needed to determine its true value as a diagnostic aid and/or epidemiological screening tool. (EB)

9524 **Ullmann, G.** *Medical records for a health region.* Israel Journal of Medical Sciences (Jerusalem), 18(3), Mar 1982, 415-417. Engl.

The problems of the present system in maintaining medical records in Israel's primary care and specialist clinics, general hospitals (including emergency and outpatient departments), and other medical agencies are analyzed. Three suggestions for improving present practices are outlined and discussed; these include a better definition of the regional medical agencies and their needs, the introduction of standardized forms geared to the level and type of service, and the creation of regional networks for storing information. (DP-E)

9525 **Vyas, P.D., Sen, V., Jain, T.P., Sharma, B.N.** *Evaluation of MCH services including family welfare at urban health training centre, Adarsh Nagar, Jaipur.* Health and Population — Perspectives and Issues (New Delhi), 3(4), Oct-Dec 1980, 316-326. Engl.

The results of an evaluation of the maternal child health services provided by the Urban Health Training Centre, Jaipur, India, are discussed and presented as statistical data. Analysis of the centre's medical records revealed that both antenatal and postpartum care were satisfactory for the 195 pregnant women registered and that the medical officer played little role in the delivery of maternal child health services. The medical records, however, were incomplete and poorly maintained. (DP-E)

9526 **Warner, D.B., Donaldson, D.** *Environmental health in Egypt: a sectoral assessment and recommendations.* Arlington, Va., Water and Sanitation for Health Project, WASH Field Report No. 33, Apr 1982. 139p. Engl.

This extensive report on environmental health conditions in Egypt covers the following topics: existing environmental health infrastructure and legal framework; the environmental health subsectors; institutions and resources for environmental health; key environmental health problems; environmental health strategies currently being used by the government of Egypt and US AID; and considerations for the development of future strategies. The last two chapters contain a strategy for strengthening existing government institutions and a coordinated package of six programme proposals for US AID intervention, respectively. (HC-L)

9527 **Weekly Epidemiological Record, Geneva.** *Expanded Programme on Immunization; evaluation of immunization coverage/Programme Elargi de Vaccination; évaluation de la couverture vaccinale.* Weekly Epidemiological Record (Geneva), 56(32), 14 Aug 1981, 253-254. Engl., Fren.

Vaccination coverage in nine out of 10 health sectors (the capital was excluded) in Rwanda was evaluated during the 3rd year of operation of WHO's Expanded Programme of Immunization. The evaluation methodology used was that recommended by WHO except that a wider age range of children (aged 3-35 months instead of 12-23 months) were investigated to compensate for problems posed by difficult communications and low population density. The results indicated that the target coverage of 25% for BCG and 15% for measles had been exceeded. An overall programme review, with participation by an international team, is planned for 1982. (HC-L)

9528 **Weekly Epidemiological Record, Geneva.** *Expanded Programme of Immunization in the Eastern Mediterranean Region/Programme Elargi de Vaccination dans la Region de la Méditerranée Orientale.* Weekly Epidemiological Record (Geneva), 56(20), 22 May 1981, 153-155. Engl., Fren.

This paper reviews the activities of the Eastern Mediterranean Region *vis-à-vis* the Expanded Programme of Immunization launched by the World Health Assembly in 1974. Since then, virtually all countries in the region have become involved in the programme, national vaccination record-keeping has greatly improved, and the percentage of children receiving a full course of DPT and TOPV (trivalent oral polio vaccine) has quadrupled. The main tasks during the 1980s will be to maintain a steady increase in coverage, reaching well beyond the limits of the present health services, and to sharpen considerably the instruments of evaluation. (HC-L)

9529 **Weekly Epidemiological Record, Geneva.** *Communicable disease surveillance during the Haj pilgrimage 1979 (Saudi Arabia)/Surveillance des maladies transmissibles pendant le pèlerinage (Hadjd) en 1979.* Weekly Epidemiological Record

(Geneva), 55(16), 18 Apr 1980, 113-117. Engl., Fren.

In preparation for the Haj pilgrimage in 1979, Saudi Arabia's ministry of health strengthened its curative facilities and, especially, its diarrheal diseases clinics; set up 10 communicable surveillance teams; trained health inspection teams, mainly for catering establishments; organized environmental health teams for ensuring water safety and basic sanitation; and developed reporting procedures for use not only in government facilities but also by private clinics and temporary medical missions. Complementary efforts on the part of other departments included the strengthening of the sanitary infrastructure, the building of roads, and the provision of transportation for pilgrims. As a result, the pilgrimage passed without a major outbreak of communicable diseases (23 cases of cholera were identified and treated) despite an influx of over 2 million pilgrims. Preparations for the 1980 pilgrimage are briefly discussed. (HC-L)

9530 **Young, T.K.** *Primary health care for isolated Indians in northwestern Ontario.* Public Health Reports (Rockville, Md.), 96(5), Oct 1981, 391-397. Engl. 18 refs.

After briefly assessing the health status of the local Indian population, the author describes the organization of available health services in the 25 isolated communities in the Sioux Lookout Zone, northern Ontario, Canada. Information is also presented on health expenditures, communication and transportation systems, and the use of primary care services. Comparisons of the rates of death, hospital admissions, and tuberculosis incidence in those communities served by nursing stations with those whose only primary care services are provided by indigenous auxiliaries indicates that the type of medical care had no noticeable effect on the health status of the population. Some statistical data are included. (DP-F)

9531 **Zein, A.** *Operational study of the out-patient department at the Public Health College Hospital at Gondar, Ethiopia.* Ethiopian Medical Journal (Addis Ababa), 16(2), Apr 1978, 45-52. Engl.

In December 1976, a study of the outpatient department of the Public Health College Hospital at Gondar, Ethiopia, was undertaken with the objective of providing the administrator with hard data on the performance of the department. By using methods of operational research, the processing of 632 patient visits was analyzed during a 5.5-day period. While the average visit lasted 3 hours and 24 minutes, nearly half of this time was spent waiting for services. About 115 patients were examined daily at a rate of 6.7 minutes per patient. Reduction in waiting time as well as minor changes in the organization of the department are recommended. Statistical data are included. (Modified journal abstract)

9532 **Zielke, E., Chlobowsky, H.O.** *Studies on bancroftian filariasis in Liberia, West Africa; V: the influence of treatment with diethylcarbamazine and vector control on the transmission of Wuchereria bancrofti.* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 31(4), 1980, 444-458. Engl. Refs.

The transmission intensity of bancroftian filariasis was investigated during a study on filariasis control carried out in eight villages of the Liberian savanna. Although the microfilarial reservoir has been reduced considerably in the human population of two villages by mass treatment with diethylcarbamazine, the transmission of *Wuchereria bancrofti* continued without any distinct reduction. The transmission, however, decreased distinctly or was even interrupted when residual spraying with DDT was used in two other villages for vector control. Nevertheless, the combined application of both control measures did not completely impede the infection of mosquitos with mature stages of *W. bancrofti*. Statistical data are included. (Modified journal abstract)

V.3 Planning

9533 **Bossert, T.J.** *Health policy making in a revolutionary context: Nicaragua, 1979-1981.* Social Science and Medicine (Aberdeen, UK), 15C(4), Dec 1981, 225-231. Engl. 12 refs.

The revolutionary regime in Nicaragua has made great strides toward the achievement of the central goals of equity of access to health services, emphasis on preventive rather than curative services, and encouragement of community participation. Nevertheless, during the 1st year of the regime, choices were made that were inconsistent with the full achievement of these goals. Equity of access increased much more for urban than for rural areas and major efforts in hospital reconstruction and education of physicians began. This article suggests that, as militant Sandinistas take more important roles in the ministry of health, a shift of emphasis is possible, especially if budgetary constraints are taken into consideration. (Modified journal abstract)

9534 **Herrmann, J.** *Ambition and reality; planning for health and basic health services in the Yemen Arab Republic.* Frankfurt am Main, Peter D. Lang, Medizin in Entwicklungsländern, Vol. 2, 1979. 135p. Engl. 32 refs.

This comprehensive report on planning basic health services in the Yemen Arab Republic is divided into three parts. Chapter I covers general information in the following areas: geography, population, history, culture, economy, education and agriculture, and general objectives and basic strategies of the country's First Five-Year Plan (1976-1881) and the National Health Plan (1976-1982). Chapter II is concerned with health manpower and training, morbidity, mortality, endemic diseases, health problems, and objectives and strategies of the health sector. Basic health services and the primary health care system, its problems, and objectives are dealt with in the last part. A review is given of the programme structure, facilities, staffing and training, and health expenditures. Statistical data are presented throughout the report. (EB)

9535 **Hoorweg, J., McDowell, I.** *Evaluation of nutrition education in Africa; community research in Uganda, 1971-1972.* The Hague, Mouton, 1979. 158p. Engl. Refs.

This monograph argues the case that evaluation of nutritional education should go beyond description of daily operations and costs and should study in detail nutrition education's influence on child health. To this end, the authors examine nutrition education programmes at three Ugandan clinics (the inpatient and outpatient departments of the main nutrition rehabilitation centre in Kampala and an outpatient clinic at nearby Luteete) and describe the problems confronting evaluative research in such settings. Study designs and indicators are presented and results analyzed with respect to the viability of the evaluative methods and the effectiveness of the teaching. An account is given of investigations into the knowledge and attitudes of 1st and final year students at teachers training colleges and into the social factors contributing to poor or good nutrition recovery. General conclusions and recommendations on the actual programmes studied are put forward; statistical data and an extensive bibliography are included. (EB)

9536 **Jordan, P.** *Targeted treatment for schistosomiasis.* Lancet (London), I(8222), 28 Mar 1981, 718. Engl.

The strategy of targeted mass chemotherapy in schistosomiasis requires proper evaluation to determine who should be treated with which drug and how often. Its success should be judged by whether it reduces heavy egg counts sufficiently to prevent the development of clinical disease. Reduction or interruption of transmission is of secondary importance. The claim is therefore disputed that this strategy is ineffective because transmission continued after treatment. (DP-E)

9537 **Learmonth, R.T.** *Food and nutrition planning — the Lesotho approach.* Food and Nutrition (Rome), 6(2), 1980, 2-6. Engl.

Recognizing the need to take a multisectoral approach to the problem of malnutrition, the government of Lesotho founded the Food and Nutrition Coordinating Office in 1978. Administered as a cabinet office with operating units in the various ministries, its mandate is to assist ministries to plan, monitor, and evaluate projects that are directly or indirectly related to food and nutrition and to formulate national policy on food and nutrition issues. This paper discusses the development of the office, its achievements to date, and its challenges for the future. (HC-L)

9538 **McWilliam, J., Uche, C.** *Nigeria: selected studies; social science research for population and family planning policies and programmes.* London, International Planned Parenthood Federation, Research for Action, No. 1, May 1976. 50p. Engl. 89 refs.

With the purpose of ascertaining how social science findings might be utilized for programme strategy or as a basis for future research, 25 studies were selected from a comprehensive bibliography on population and family planning in Nigeria. The types of surveys under review, some of the problems encountered in the search for information, and the methodologies adopted for national, urban and rural, and other types of surveys are described. An analysis of findings related to specific population and family planning topics is presented and a number of recommendations are put forth. The appendix includes a study of the historical development and financial aspects of Nigerian population research, a list of 27 recent research projects of direct relevance, and a copious bibliography. (EB)

9539 **Modan, B.** *Current status of health services in Israel.* Israel Journal of Medical Sciences (Jerusalem), 18(3), Mar 1982, 337-344. Engl.

Problems now afflicting the Israeli health care system include duplication of services, lack of continuity of care, disproportional distribution of hospital beds, lack of consumer satisfaction, partial eligibility for care, increasing costs, inadequate indicators for reimbursement, lack of criteria for allocating resources, and uncoordinated environmental control. After briefly examining programme priorities, the author presents three models for a system of regional health services, which he recommends as the solution to these problems. (DP-E)

9540 **Seal, S.C.** *Primary health care in the rural setting in India.* Indian Journal of Public Health (Calcutta, India), 25(2), Apr-Jun 1981, 69-73. Engl.

After defining primary health care and outlining the 10 health needs that it should address, the author discusses the plans and strategies devised by the Indian government to deliver the necessary services. Although some policies, such as the introduction of rural health centres, have been extremely successful, five reasons for the overall failure of government efforts to provide primary health care are discussed; these are the failure to provide the required health personnel and drug supplies, adverse sociocultural and economic conditions, the inadequacy of the laboratory services and the referral system, the failure to involve the community in the planning and operation of these services, and government reluctance to decentralize administrative supervision and control. Suggestions for strengthening these areas are presented. (DP-E)

9541 **Yekutiel, P.** *Lessons from the big eradication campaigns.* World Health Forum (Geneva), 2(4), 1981, 465-481. Engl. 18 refs.

The experience gained in campaigns against malaria, smallpox, yellow fever, and yaws has led to a better understanding of the complex factors involved in their success or failure. In this paper, the author outlines the preconditions necessary for success and proposes six criteria for the decision whether to opt for control or eradication. Past campaigns are reviewed in a search for guidelines for present and future efforts. The prospects for eradication of various diseases are also considered. Some statistical data are included. (Modified journal abstract)

9542 **Yishai, Y.** *Politics and medicine: the case of Israeli national health insurance.* Social Science and Medicine (Aberdeen, UK), 16(3), 1982, 285-291. Engl. 31 refs.

At the time this paper was written, all attempts to introduce a national health insurance (NHI) system in Israel by means of six public committees and various legislative initiatives had proved futile. The reasons for this failure are analyzed and attributed to the conflicting goals and actions of the sick funds, the political parties affiliated with them, and the Israeli Medical Association. This study serves as a further illustration of the dependence of a country's health care delivery system on the prevailing political system. (DP-E)

V.4 Geographical Distribution of Health Services and Workers

See also: 9437.

9543 **Fiedler, J.L.** *Review of the literature on access and utilization of medical care with special emphasis on rural primary care.* Social Science and Medicine (Aberdeen, UK), 15C(3), Sep 1981, 129-142. Engl. 148 refs.

Over the past 35 years, medical resources in the USA have become increasingly concentrated in medical centres and university hospitals in large urban areas and less accessible to rural patients. Although policy-makers have been aware of this evolving pattern for some time, it has continued virtually unchecked. This review describes various forces influencing this developmental pattern at both the individual and the system levels. It further discusses how government health policy, the characteristics of the health delivery system, and the characteristics of the population relate to affect access to and utilization of health care resources. (Modified journal abstract)

9544 **Haworth, A.** *Distance factor in the use of psychiatric facilities.* Medical Journal of Zambia (Lusaka), 15(1), Dec 1980-Jan 1981, 6-9. Engl.

The pattern of psychiatric admissions throughout Zambia is examined with an eye to determining whether or not the utilization of available mental health services decreases as the distance that the patient must travel increases. The results are discussed and presented as statistical data. The findings support the contention that there is a need for services in all areas and that, the closer they are to the people, the more they will be used; cooperation with traditional healers is also recommended. (DP-E)

9545 **Monteiro, C.A., D'Aquino Benicio, M.H., Baldijão, M.F.** *Mortalidade no primeiro ano de vida e a distribuição de renda e de recursos públicos de saúde, São Paulo (Brasil). (Mortality in the first year of life and the distribution of income and public health facilities, São Paulo, Brazil).* Revista de Saúde Pública (São Paulo, Brazil), 14(4), Dec 1980, 515-539. Portuguese. 13 refs.

Infant mortality in 55 municipalities of São Paulo, Brazil, was calculated and correlated with data on income distribution, water consumption, and availability of maternity beds and government clinics in each. Overall infant mortality was 75.03:1 000 live births, with the municipalities with the highest infant mortality corresponding to those with the highest proportion of low-income families, the lowest consumption of water per person, and the least access to government services. Geographically, mortality rose and government services declined from the centre to the periphery. This paper presents and discusses the study findings and includes 9 tables of data and 6 maps. (HC-L)

9546 **Webster, D.B., Packer, M.W.** *Effects of two rural scholarship programs on practice location decisions of dental graduates: Kentucky's experience; part one: evaluation of the Southeastern Kentucky Health Professions Scholarship Program.* Journal of the Kentucky Dental Association (Louisville, Ky.), 33(3), Jul 1981, 21-24. Engl.

In 1971, a scholarship programme was begun in southeastern Kentucky (USA) in an effort to recruit and train local students (who agreed to return one year of professional service for each year of financial support received or else repay the loans in full) in 14 different health professions. This report examines the impact of this programme on the distribution of dentists in the region. With the help of statistical data, it is shown that, of 29 dental graduates, 10 have completed their practice obligation and are continuing to practice in southeastern Kentucky, 13 are still completing their practice obligation, and 6 have defaulted but are paying back their scholarships. (DP-E)

V.5 Financial Aspects

See also: 9490, 9640.

9547 **Habte-Gabr, E., Mengistu, M.** *Tetanus in Gondar Public Health College Hospital, Ethiopia: a review of 72 cases.* Ethiopian Medical Journal (Addis Ababa), 16(2), Apr 1978, 53-61. Engl. 34 refs.

Records of 72 tetanus cases admitted during a 2-year period to the Gondar Public Health College Hospital in Ethiopia are analyzed. There were 8 neonates, 22 patients aged less than 9 years, and 33 patients aged less than 39 years; males were predominant, though mortality did not vary with sex. Overall mortality was 61% (67% in severe cases) with variations in age. The various complications and causes of death are discussed. The study justifies the need for a special unit for better and continuous care using trained health assistants without additional cost. The cost-benefit analysis demonstrates the vital importance of active immunization programmes and appropriate health education. Statistical data are included. (Modified journal abstract)

9548 **Heller, P.S.** *Model of the demand for medical and health services in peninsular Malaysia.* Social

Science and Medicine (Aberdeen, UK), 16(3), 1982, 267-284. Engl. 36 refs.

This paper provides an empirical analysis of the determinants of the demand for medical services in peninsular Malaysia. The author elaborates a theoretical model of household demand and specifies and estimates an econometric model. The results indicate that total medical demand is highly inelastic to the cash price and to the cost in time of utilization. Total medical demand is also inelastic with respect to income. Yet consumers are clearly responsive to the relative prices of alternative sources of medical care and sensitive to the way in which the time of utilization is spent, with high travel and treatment time causing reduced demand for services. Statistical data are included. (Modified journal abstract)

9549 **Jaeclocs, M., Van de Velden, L.** *Algorithme-test pour consultations primaires auto-financées (Pikine, Sénégal): intérêt sanitaire et économique. (Algorithm test for self-financed preliminary consultation (Pikine, Senegal); health and economic value).* Dakar Médicale (Dakar), 27(1), 1982, 1-9. Fren. 14 refs

In analyzing 356 consultations involving patients complaining of fever at a government health post in Pikine, Senegal, the following aspects were evaluated: the behaviour of nurses, the therapeutic decision taken, and the cost involved. The results showed that the percentage of specific diseases associated with the dominant symptom had increased from 27.2%-65.8% and improper prescription of drugs was reduced in 80% of the cases. This algorithm test is considered an appropriate working tool for primary health care posts. The article includes an outline of diagnostic and therapeutic procedures and symptomatic treatment of fever in infants. (EB)

9550 **Khaled, N.A., Oussedik, N., Chaulet, P.** *Changes in the cost of anti-tuberculosis drugs from 1964 to 1980; its influence in the choice of a policy of treatment of tuberculosis in Algeria.* Bulletin of the International Union Against Tuberculosis (Paris), 56(3-4), Sep-Dec 1981, 156-159. Engl.

Data are presented on the cost of anti-tuberculosis drugs in Algeria from 1964-1980. Because cost influences the choice of treatment, government policy has changed several times in response to changing prices. It is suggested that surveying the cost of essential drugs on the national as well as the global market should be a permanent part of Algeria's tuberculosis control programme. (DP-E)

9551 **Melrose, D.** *Great health robbery; baby milk and medicines in Yemen.* Oxford, UK, OXFAM, Public Affairs Unit, 1981. 50p. Engl. 37 refs.

This booklet describes social conditions in Yemen and briefly examines the political, economic, and social factors contributing to ill health. Existing health services in Yemen are considered, with special emphasis on the Raymah Health Project. The country's two major health problems — the promotion of artificial baby milk with the subsequent decline of breast-feeding and the uncontrolled importation and distribution of expensive and often useless drugs — are analyzed in some detail. Suggestions for appropriate action are included as well as an appendix of useful addresses, films, and further reading. (DP-E)

9552 **Stanhope, J.M.** *Control programmes for streptococcal disease among rural school children.* New Zealand Medical Journal (Wellington), 92(664), 23 Jul 1980, 41-44. Engl. 10 refs.

In a high risk rural area of New Zealand, a study of primary preventive strategies aimed at rheumatic fever and heart disease was undertaken among primary school students. The strategies compared included: 1) identification and treatment of asymptomatic streptococcus carriers at 3-month intervals; 2) between-survey home visits of a nurse to identify infections and encourage prompt referral to the family doctor; and 3) an exercise programme intended to increase general and respiratory fitness. Some benefit resulted from each strategy but the exercise programme was the least costly. The benefits of the other strategies are probably insufficient to make them worthwhile. Statistical data are included. (Modified journal abstract)

9553 **Stephenson, L.S., Latham, M.C., Odoori, M.L.** *Costs, prevalence and approaches for control of* Ascaris *infection in Kenya.* Journal of Tropical Pediatrics (London), 26(6), Dec 1980, 246-263. Engl. Refs.

This economic study on costs of ascariasis in Kenya estimated conservatively that *Ascaris* infection was costing Kenyans about US$5 000 000 in 1976, while the cost of a broad spectrum anthelminth (excluding the delivery system) provided to all Kenyans would be less than 20% of that. Various possible delivery systems for anthelminthics can be used but will vary from country to country. It is probable that *Ascaris* and other intestinal helminths will in time virtually disappear from poor tropical areas with improvements in personal hygiene, increased latrine use, and greater availability of safe water supplies. Meanwhile, periodic deworming of preschool children in areas where *Ascaris* infection and malnutrition coexist is highly desirable. Statistical data are included. (Modified journal abstract)

9554 **Zamrawi, F., Vaughan, J.P., Simmonds, S.P.** *Baby milk in Khartoum province — how many tins does a pharmacy sell?* Journal of Tropical Pediatrics (London), 27(4), Aug 1981, 224-225. Engl.

A survey of 22 pharmacies in central Khartoum and 21 pharmacies in Omdurman, Sudan, revealed that the average pharmacy displayed five different brands of infant milk powder, that the average number of tins on display was 98 for Khartoum and 133 for Omdurman, and that the average number of tins sold per month was 474 for Khartoum and 489 for Omdurman. At the time the survey was carried out, one of the most popular brands was selling in Khartoum at twice its price in the UK and nearly three times its price in a London (Eng-

land) welfare clinic. It is concluded that there is a huge demand from urban populations for infant milk powder that is being met — if not aided and abetted as well — by the manufacturing companies and the pharmacies to their considerable benefit. (HC-L)

V.6 Cultural Aspects

See also: 9428, 9661, 9707, 9800.

9555 **Akin, J.S., Guilkey, D.K., Popkin, B.M.** *Demand for child health services in the Philippines.* Social Science and Medicine (Aberdeen, UK), 15C(4), Dec 1981, 249-257. Engl. 25 refs.

Little research has focused on the factors affecting the use of components of primary health care services, particularly in developing countries. This study examines the patterns of usage of child health care provided for preschoolers by modern public, modern private, and traditional health practitioners as well as by self treatment. A simultaneous logit framework is used to study the determinants of choice among these four child health service alternatives. The analysis is based on the Bicol Multipurpose Survey, conducted in one of the poorest regions of the Philippines as a multi-visit household and community survey of 1 906 households and 100 communities, representative of the three major provinces in this region. (Modified journal abstract)

9556 **Boroffka, A.** *Benedict Nta Tanka's commentary and dramatized ideas on "Disease and Witchcraft in our Society".* Frankfurt am Main, Peter D. Lang, Medizin in Entwicklungsländern, Vol. 7, 1980. 150p. German. 51 refs.

This volume, considered the 1st account of an African on his psychosis, presents the annotated autobiographical notes of a civil servant in Cameroon, Mr. Benedict Nta Tanka (born 1943). The case study begins with the patient's history, findings, therapy, course of illness, and previous medical reports, and follows with original writings by Mr. Tanka in which he gives descriptions of his hallucinatory and delusional experience, which began in March 1968. He tries to explain these events as consequences of witchcraft. Included are a collection of 58 dreams and a description of his tribe, the little known Menka. The writings are supplemented by psychiatric comments by Dr. Boroffka. The study illustrates a finding of the WHO International Pilot Study on Schizophrenia that schizophrenic psychoses in Africans tend to have a better social outcome than clinically comparable schizophrenic disorders in Europeans and North Americans. (EB)

9557 **Chen, L.C., Huq, E., D'Souza, S.** *Sex bias in the family allocation of food and health care in rural Bangladesh.* Population and Development Review (New York), 7(1), Mar 1981, 55-70. Engl. 25 refs.

This paper reports studies of individual food intakes, morbidity, and use of health care facilities during a continuous longitudinal research programme in rural Bangladesh. Anthropometric and socioeconomic data were obtained for 882 children aged less than 5 years and household and individual food intake was studied in 130 families. When energy intake was related to requirements, it appeared that female preschool children were relatively disadvantaged; they were shorter and lighter than males and were less frequently taken to health care centres. However, attack rates of common childhood illnesses were the same for males and females. The authors conclude that there is evidence that preschool girls receive less food and health care than boys. (DP-E)

9558 **Cohen, F.S.** *Childbirth belief and practice in a Garifuna (Black-Carib) village on the north coast of Honduras.* Western Journal of Nursing Research (Anaheim, Cal.), 4(2), Spring 1982, 193-208. Engl. Refs.

Beliefs and practices related to pregnancy, delivery, and postpartum and immediate infant care among a Garifuna (Black Carib) population in Río Tinto, Honduras, are reported. It appears that the midwife is indispensable, though some of her methods may be questionable. Practices differ from those in North America in a number of ways and the author considers their adoption. Maternal mortality was almost non-existent, indicating that home delivery may be a good idea. The author concludes that both cultures could learn from each other and improve maternal child health services. (Modified journal abstract)

9559 **Dietrich, A.J., Olson, A.L.** *Political and cultural factors in achieving continuity with a primary health care provider at an Indian health service hospital.* Public Health Reports (Rockville, Md.), 96(5), Oct 1981, 398-403. Engl. 14 refs.

This experiment in the Zuni village (New Mexico, USA) shows that it was possible for the workers of the Indian Health Service to establish a primary care system with a minimum of outside help by adding continuity and coordination of care to the existing health services. Special attention was given to the cultural and political setting and efforts were made to safeguard the patients' privacy and free choice. Evaluation after 8 months indicated that 64% of patients treated had established a personal relationship with a health care provider, although there was some unexpected resistance from the providers themselves. (DP-E)

9560 **Erinosho, O.A., Ayonrinde, A.** *Cross-national comparison of patterns of utilization and psychiatric care.* International Journal of Social Psychiatry (London), 27(4), 1981, 289-296. Engl.

The objectives of this paper are: (a) to determine the relationship between social class and the utilization of a public psychiatry facility in Nigeria; (b) to examine the range of treated patients in psychiatric facilities in a technologically developed Euroamerican society in relation to a developing country such as Nigeria where modern psychiatric care was recently introduced to the population; and (c) to investigate differences in the therapies that are administered to patients of various socioeconomic backgrounds in these societies. The re-

sults of the study are discussed and presented as statistical data. (Modified journal abstract)

9561 **Fosu, G.B.** *Disease classification in rural Ghana: framework and implications for health behaviour.* Social Science and Medicine (Aberdeen, UK), 15B(4), Oct 1981, 471-481. Engl. 26 refs.

The prime concerns of this paper are to investigate how the people of Berkuso, a rural community in Ghana, classify diseases and to examine the extent to which this classification affects the utilization of existing health care facilities. Using the cause as the main distinguishing factor, diseases are classified into three main types: those believed to be caused by natural agents, those believed to be caused by supernatural agents, and those whose causes embrace both types of agents. The study revealed that the classification affects utilization behaviour to the extent that knowledge of a cause of the disease allowed a fairly accurate prediction of what health care facility would be used. Statistical data are included. (Modified journal abstract)

9562 **Gupta, K.B., Walia, B.N.** *Utilisation of health facilities by rural children.* Indian Pediatrics (Calcutta, India), 18(4), Apr 1981, 217-221. Engl. 8 refs.

House-to-house interviews were conducted in two villages in Punjab, India, in order to discover what health facilities were utilized for treatment of common childhood illnesses. Out of 853 episodes of illness occuring in 146 children, 30.2% were treated by home remedies, 6.8% in the primary health centre or one of its subcentres, 31.54% by private practitioners, and 21.28% from multiple sources. Western treatment was sought in almost 50% of cases and even the two private practitioners, although untrained, used Western methods. This finding refutes the claim that rural people prefer medical care from indigenous practitioners, and some of the other factors influencing the villagers' choice (distance from facility, availability of personnel and drugs, etc.) are discussed. (HC-L)

9563 **Henner, G., Joly, F., Hulin, A.** *Kwashiorkor en Guyane Française; à propos de 12 cas. (Kwashiorkor in French Guyana; 12 cases).* Médecine d'Afrique Noire (Paris), 29(1), Jan 1982, 39-42. Fren. 9 refs.

The discovery of 12 cases of kwashiorkor among a previously healthy population in French Guiana prompted an enquiry into the group's life-style in order to determine what recent changes might be responsible for their deteriorating nutritional state. The population was found to be undergoing a process of modernization involving regroupment in insanitary *bidonvilles*, buying food instead of producing it, and abandoning breast-feeding for artificial infant feeding. This paper describes the 12 cases of malnutrition (clinical features, biological features, complicating factors, and outcome of treatment) and suggests that efforts aimed at cushioning this society from the worst effects of transition be mounted by the department of health. (HC-L)

9564 **Karlin Feierman, E.** *Alternative medical services in rural Tanzania: a physician's view.* Social Science and Medicine (Aberdeen, UK), 15(3), Jul 1981, 399-404. Engl. 8 refs.

A physician evaluating health status among rural Tanzanian children examines the use of traditional and hospital-based medical care in the Usambra Mountains. The available services are used by most of the population, but poor relations between hospital-based and traditional practitioners creates discomfort for the villagers and inhibits their attendance. It is suggested that relations can be improved by having both health workers and village women discuss problems at the village health committee, encouraging traditional healers to participate fully on the committee and be trained to hold village health posts, and encouraging women to attend the clinic and eliminating the disparagement of traditional medicines in all clinics. (DP-E)

9565 **Kimani, V.N.** *Unsystematic alternative: towards plural health care among the Kikuyu of central Kenya.* Social Science and Medicine (Aberdeen, UK), 15B(3), Jul 1981, 333-340. Engl. 10 refs.

In an attempt to assess the possibility of incorporating it into Western-style health services, Kenya's traditional medical system is analyzed in terms of concepts of disease causality and diagnostic and treatment procedures. While the traditional system is viewed as lacking a coherent set of requirements, ethics, skills, and levels of communication, it nevertheless fulfills social and phychological needs in the patient that are completely ignored by Western practitioners. (DP-E)

9566 **Kloos, H., Sidrak, W., Malek Michael, A.A., Mohareb, E.W., Higashi, G.I.** *Disease concepts and treatment practices relating to schistosomiasis haematobium in Upper Egypt.* Journal of Tropical Medicine and Hygiene (London), 85(3), Jun 1982, 99-107. Engl. Refs.

Disease concepts and medical treatment practices surrounding schistosomiasis haematobium were studied among males in upper Egyptian villages and towns using interview methods. Most informants surveyed considered bilharzia a serious disease for which they commonly sought treatment. Its occurence was attributed primarily to natural causes, particularly aquatic worms and insects, dirts, excrement, dead animals, toxins, and stagnant and vegetated waters, mostly in large canals. Contact with water from the Nile was generally thought to be safe. Drug treatment was weakly associated with amount of education, although all groups reported use of antischistosomal drugs and plant medicines. The questionnaire used is contained in the index. Statistical data are included. (Modified journal abstract)

9567 **Kloos, H., Tekle, A., Yohannes, L.W., Yosef, A., Lemma, A.** *Preliminary studies of traditional medicinal plants in nineteen markets in Ethiopia: use patterns and public health aspects.* Ethiopian Medical Journal (Addis Ababa), 16(2), 1978, 33-43. Engl. 16 refs.

Plant collections and interview surveys were made on user and public health aspects of traditional medicines sold by 416 vendors in six markets in Addis Ababa and in 13 markets in towns and villages of Ethiopia. A total of 41 types of plant material were found for sale for a great variety of illnesses and diseases. Grouped according to usage, they are listed in a table containing both Latin and vernacular names, the part(s) of the plant used, the method(s) of preparation, the number of vendors, and clinical indications. Preliminary research suggests that several traditional medicines may be further developed by the pharmaceutical industry. Statistical data are included. (Modified journal abstract)

9568 **Last, M.** *Importance of knowing about not knowing.* Social Science and Medicine (Aberdeen, UK), 15B(3), Jul 1981, 387-392. Engl.

In the Hausa medical culture in Malumfashi district, Nigeria, traditional medicine is at the bottom of the hierarchy of medical systems and, because of the disunity of traditional doctors, their lack of a single consistent theory, and the wide variation in meaning of the medical terminology in daily use, largely unsystematized. Since traditional medicine is not itself a system, the claim of European and Islamic medicine to be systems of universal validity is popularly denied — they are simply tacked on to the existing kaleidoscope of medical ideas. Patients recognize only a single, wide-ranging corpus of illnesses for which all the different healers between them should possess the cures; doctors are not necessarily interested in causes. Hence, the notion of "alternative systems" may have little relevance within the popular culture. (Modified journal abstract)

9569 **Manderson, L.** *Socio-economic and cultural correlates of gastroenteritis amongst infants and small children in Malaysia.* Journal of Tropical Paediatrics (London), 27(3), Jun 1981, 166-176. Engl. 22 refs.

With an aim to isolating significant demographic, economic, social, and cultural variables that may contribute to admission to hospital with acute gastroenteritis, this retrospective study focused on 346 of the 1 954 children admitted to the gastroenteritis ward of the Kuala Lumpur General Hospital (Malaysia) between July 1977-June 1978. Of these, 44% were Malay, 29% Indian, and 26% Chinese. Average period of hospitalization was 6 days, with 84% of the patients discharged within a week; 12 patients died following admission. The discussion, with tables, considers the following: parents' education and occupation, financial status, family size, pregnancy and 1st month of life of patient, infant feeding practices, and child growth and development. Comparison is made with other studies on feeding habits and incidence of enteric infection. (EB)

9570 **Manderson, L., Mathews, M.** *Vietnamese behavioral and dietary precautions during pregnancy.* Ecology of Food and Nutrition (London), 11(1), 1981, 1-8. Engl. 22 refs.

Behavioural and dietary prescriptions and proscriptions observed by 40 ethnic Vietnamese and Vietnamese-Chinese women during pregnancy are explored within the context of traditional Vietnamese medicine and its humoral classification of physiological states and foodstuffs. The medical, nutritional, and psychosocial effects of the continued observance of these customs in Australia are discussed. The restrictions appear to be important cultural elements in prepartion for motherhood. In Australia, hospitalization prevented observation of these prescriptions, to the distress of the majority of women. It is suggested that, where practicable, women be allowed to observe traditional precautions after childbirth. (Modified journal abstract)

9571 **Mudambi, S.R.** *Breast-feeding practices of mothers from mid-western Nigeria.* Journal of Tropical Pediatrics (London), 27(2), Apr 1981, 96-100. Engl. 9 refs.

Interviews with 50 literate and 60 illiterate nursing mothers and 40 nurses held in health centres and clinics in midwestern Nigeria revealed the following: the majority of literate mothers breast-fed their infants for 2-9 months while the illiterate mothers breast-fed for 6-18 months; the majority of literate mothers expressed a preference for bottle-feeding over breast-feeding; 104 of the 110 mothers were using artificial milk supplements, 61 of them from the 1st month; and 47% of the mothers had been advised by their nurses to use milk supplements. Further questioning revealed that mothers were highly influenced by advertisements for milk substitutes and the need to counteract this influence by involving all medical personnel in the promotion of breast-feeding is strongly indicated. (HC-L)

9572 **Murphy, H.B., Taumoepeau, B.M.** *Traditionalism and mental health in the South Pacific: a re-examination of an old hypothesis.* Psychological Medicine (London), 10(3), 1980, 471-482. Engl. Refs.

Nineteenth-century theory held that mental disorder was rare in stable, traditional rural societies. Today most societies are rapidly changing, but Tonga still fits the 19th-century model and the evidence suggests that psychoses are genuinely infrequent there. It is proposed that both the theory and the evidence deserve further examination. (Journal abstract)

9573 **Neumeyer, J.L., Guan, J.H.** *Pharmacy and the pharmaceutical industry: past, present, and future; the People's Republic of China.* American Pharmacy (Washington, D.C.), 22(1), Jan 1982, 14-21. Engl. Refs.

Various issues relating to drugs, both traditional and Western, and their manufacture in the People's Republic of China are examined. These include health care facilities, pharmaceutical education, pharmaceutical associations, the research establishment, the pharmaceutical industry, and the pharmacy. A list of 10 typical products from a traditional Chinese pharmaceutical works is appended. (DP-E)

9574 **Okunade, A.O.** *Attitude of Yoruba of western Nigeria to handicap in children.* Child Care, Health and Development (Oxford, UK), 7(4), Jul-Aug 1981, 187-194. Engl.

A questionnaire designed to elicit attitudes toward visual, auditory, and physical handicap in children was administered to four different Nigerian population groups: Western-educated, transitional, traditional urban, and traditional rural. The responses to the questionnaire are summarized in five tables. Although a considerable number of respondents in each group attributed handicap to supernatural agents and would seek help from spiritual sources, the majority would turn to the hospital alone or as well. Most of the transitional and traditional respondents were unaware of the existence of special facilities for the handicapped. It is suggested that nurses are in a unique position to educate the public regarding handicap and to identify handicapped children as early as possible. (HC-L)

9575 **Onuoha, G.B.** *Changing scene of food habits and beliefs among the Mbaise people of Nigeria.* Ecology of Food and Nutrition (London), 11(4), 1982, 245-250. Engl. Refs.

A rural society in Nigeria (Mbaise, an Igbo ethnic group) was surveyed on their current food habits and beliefs. Certain food items had long been prohibited, originally because of superstitions. Recent economic, social, and educational improvements are gradually changing attitudes towards foods, especially among the young. This trend, which can be sustained through intensive health education, will help to reduce the negative effects of food taboos. Statistical data are included. (Modified journal abstract)

9576 **Ramesh, A., Hyma, B.** *Traditional medicine in an Indian city.* World Health Forum (Geneva), 2(4), 1981, 495-499. Engl. 8 refs.

A field survey in Madras (India) indicated that traditional practitioners provide much of the health care in that country and that there is a wide variation in the quality of the care they provide. These healers do, however, provide satisfactory care for common local ailments. The survey also showed that there is almost no cooperation between indigenous and modern medicine, thus making the integration of the traditional healers into the country's health services very difficult. The authors discuss the issues that must be addressed in order to bring about this integration. Some statistical data are included. (Modified journal abstract)

9577 **Ryan, M.** *Childbirth in remote Papua New Guinea.* Australian Nurses Journal (Melbourne, Australia), 10(11), Jun 1981, 44-45. Engl.

In July and August 1980, six Papua New Guinea nurses visited 21 villages and interviewed 292 women to identify local practices and beliefs regarding childbirth. Part of a training course, the survey was intended to collect data that might help to reduce high infant and maternal death rates. The women's responses in the areas of nutrition, antenatal care, village customs, and delivery are tabulated and discussed. (DP-E)

9578 **Staiano, K.V.** *Alternative therapeutic systems in Belize: a semiotic framework.* Social Science and Medicine (Aberdeen, UK), 15B(3), Jul 1981, 317-333. Engl. 18 refs.

Based on fieldwork conducted over a 16-month period (1978-1980) in Punta Gorda, Belize, this in-depth study presents data on the sociomedical system of an ethnically heterogeneous society and provides a semiotic framework for the analysis of illness episodes. With the focus on the possible functions of alternative therapeutic systems, the wide range of therapies and resources available to the Black Caribs (or Garifuna) are described and a closer look is taken at five distinct types of healers. The complexities of the process of interpretation and negotiation are illustrated with the presentation of two case histories. The reasons for the existence of a pluralistic system and the advantages of its continuation are considered. (EB)

9579 **Sussman, L.K.** *Unity in diversity in a polyethnic society: the maintenance of medical pluralism on Mauritius.* Social Science and Medicine (Aberdeen, UK), 15B(3), Jul 1981, 247-261. Engl. 11 refs.

This in-depth study of the diverse healing traditions and beliefs on Mauritius is based on a field project undertaken from May 1979-April 1980 involving 32 households (189 individuals) in two small southwestern towns. It examines the types of healing resources available: biomedicine, homeopathic, Chinese and Ayurvedic medicine, professional and folk herbalists, special secular healers, religious specialists, temples, shrines, and sorcerers. Further explored are the concepts of illness causation, behaviour during illness episodes, the structure of the decision-making process during the quest for cure, and factors influencing patients' choice of therapeutic resource. A number of conclusions are drawn concerning the consistent, unified medical belief system in this polyethnic society. (EB)

9580 **Young, J.C.** *Non-use of physicians: methodological approaches, policy implications, and the utility of decision models.* Social Science and Medicine (Aberdeen, UK), 15B(4), Oct 1981, 499-507. Engl. 53 refs.

This paper considers ethnographic approaches to the study of health care choice-making in medically pluralistic settings. It focuses on the ways in which different methodological orientations may lead to varying explanations for the non-use of Western-style medical treatment, having dissimilar implications for policies concerning the delivery of health services in such settings. Several approaches are evaluated and the results of the application of a cognitively-oriented decision-modeling approach in a rural Mexican community are described and the comparative advantages of this approach emphasized. (Modified journal abstract)

V.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition, and Disease Control Studies

See also: 9318, 9347, 9483, 9490, 9505, 9521, 9545.

9581 **Abahossen, M.A., Grigsby Harrison, G., Pear-**

son, P.B. *Nutritional status of Saudi Arab preschool children in the eastern province*. Ecology of Food and Nutrition (London), 10(3), 1981, 163-168. Engl. 12 refs.

Anthropometric measurements were taken for 198 essentially normal children aged 1-5 years attending a company maternal child health clinic in Dhahran, Saudi Arabia. Data on feeding patterns, incidence of diarrhea, young child mortality, age of mother, and socioeconomic factors were obtained from the mothers, the employer, or hospital records. This paper analyzes the study findings. According to the Gómez index of weight-for-age, 31% of the children were mildly and another 5% moderately malnourished. Female children aged more than 30 months showed greater deficits in both height and weight than their male counterparts. (HC-L)

9582 **Abukada, A.O., Hussain, M.A.** *Nutritional status and dietary intake of lactating Yoruba mothers in Nigeria*. Ecology of Food and Nutrition (London), 10(2), 1980, 10(2)5-111. Engl. 43 refs.

Nutrient intake was assessed for 75 rural and 25 urban apparently healthy lactating women of poor socioeconomic background in the area of Ibadan, Nigeria. The nutrition status of the mothers and of the infants, on a monthly basis from age 3 weeks-6 months, was also studied. The maternal diet was found to be adequate in iron, thiamin, calcium, and vitamin A but inadequate in energy, protein, riboflavin, and ascorbic acid. In spite of this, the body weights of the women were near normal and the infants' weight-for-age were 85%-100% of the standard. This paper describes the study methods and presents and discusses its results. (HC-L)

9583 **Abbas Hassan, H., Ezzat, W., Lebshtin, A.** *Scabies as a health problem among primary school children in Cairo*. Journal of the Egyptian Public Health Association (Cairo), 54(1/2), 1979, 65-75. Engl. 15 refs.

Approximately 4 000 schoolchildren from five primary schools in Cairo, Egypt, were examined for scabies and the parents of those in whom the diagnosis was confirmed were interviewed regarding socioeconomic status, living conditions, contact with scabietic persons, etc. The overall attack rate was found to be 3.9%, but it was 4.9% among the lower socioeconomic strata and 1.9% among the higher. Transmission seemed to occur in the home environment as a result of overcrowding and poor sanitary conditions. Periodic screening and treatment of schoolchildren and their contacts is recommended as a means of combatting this disease, which is on the rise in many parts of the world. Statistical data are included. (HC-L)

9584 **Abengowe, C.U.** *Cardiovascular disease in northern Nigeria*. Tropical and Geographical Medicine (Haarlem, Netherlands), 31(4), Dec 1979, 553-560. Engl.

The case files of 4 456 medical admissions in 1975-1976 at Ahmadu Bello University Teaching Hospital, Kaduna, Nigeria, included 354 cardiovascular patients. The most common conditions were hypertension, cardiomyopathy, and chronic heart disease. The majority of hypertensive patients suffer from essential hypertension, of which congestive cardiac failure is the commonest complication. Rheumatic valvular disease with mitral incompetence is frequent and sometimes severe in young people. A number of other cardiovascular diseases were encountered; cardiovascular mortality in hospital was high. Statistical data are included. (Modified journal abstract)

9585 **Adams, B.** *Development of maternal and child health services in the minority communities of Israel*. Curationis (Pretoria, South Africa), 4(1), Jun 1981, 19-21. Engl.

This article looks at the changes that have occured in maternal and child health in Israel's minority communities, the role of nursing care, and what still needs to be done. Six tables present statistics on the following: (1) infant mortality by population groups, 1924-1947; (2) maternal deaths by population groups, 1965-1977; (3) infant mortality by country, 1955-1977, Israel and selected Arab countries; (4) infant death by age among non-Jews, 1955-1977; (5) average number of children by population groups; and (6) average live births of mothers aged 30-34 years, by education level and population groups. Reasons for the decline in maternal and infant mortality (e.g. increased number of hospital deliveries, immunization, etc.) and changes in the nursing profession are discussed. (EB)

9586 **Agarwal, R.K., Jain, A.M., Dube, M.K., Bhandari, B.** *Anaemia in protein energy malnutrition in preschool children*. Indian Journal of Medical Research (New Delhi), 72(2), Aug 1980, 236-240. Engl. 28 refs.

Clinical and haematological profiles of 67 Indian children aged 6-36 months who had anaemia with protein energy malnutrition were studied. Their bone structure marrow cytology, haemosiderin content, serum iron, iron binding capacity, serum vitamin B12, serum folate, and total proteins were estimated. Fifty-eight children (86.5%) had evidence suggestive of iron deficiency and 27 children had nutritional megaloblastic anaemia, mainly due to folate deficiency. Statistical data are included. (Modified journal abstract)

9587 **Ahmed, R.U., Lövgren, M., Velarde, N., Abrahamsson, L., Hambraeus, L.** *Study on home-prepared weaning foods for consumption in Bangladesh, with special reference to protein quality*. Ecology of Food and Nutrition (London), 11(2), 1981, 93-102. Engl. Refs.

Ten nutritionally well-balanced, culturally acceptable, home-prepared weaning food recipes were formulated from cheap, locally available foods of vegetable origin for consumption in rural Bangladesh. Of these mixes, 5 were based on rice and 5 on wheat, with pulses (bengalgram, blackgram, lentil, mungbean, and khesari) used

as protein supplements, each mix fulfulling the 1975 FAO/WHO recommendations. The preparation methods, chemical analysis, calculation of nutritional value, and biological evaluation are described with the use of tables. The authors express the need to motivate people through the maternal child health and applied nutrition programme to add fish and leafy vegetables to the diets of infants and young children. Statistical data and a list of reference: are included. (EB)

9588 **Albiez, E.J., Gouley, J.P., Buttner, D.W.** *Ocular onchocerciasis in a hyperendemic village in the rain forest of Liberia.* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 32(1), 1981, 25-28. Engl. Refs.

Ophthalmological examination of 76 persons in a village hyperendemic for onchocerciasis in the Liberian rain forest revealed a reduced visual acuity of less than 6/18 in nearly 10%. Punctate keratitis was observed in 36%, microfilariae in the anterior chamber in 46%, proliferative chorioretinitis in 4%, and optic atrophy in one person. The overall frequency of ocular onchocerciasis was 62%, but the severity of findings in most individuals was minimal. The occurrence of microfilariae in the anterior chamber was positively correlated with microfilarial densities in the skin of the hip, outer canthus, and blood, and with the burden of adult *Onchocerca volvulus* isolated from extirpated onchocercomata. Statistical data are included. (Modified journal abstract)

9589 **Allerdist, H., Ehrengut, W., Fofana, Y.** *Diphtheria immunity in Mali (mothers and their neonates and children under two years of age).* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 32(4), 1981, 274-275. Engl. 9 refs.

An analysis of diphtheria antibodies (indirect haemagglutination technique) in 85 paired sera of Malian mothers and their newborns (cord blood) showed that all mothers had protective antibody levels, while 81% of the neonates demonstrated protective immunity towards diphtheria. Since in Mali respiratory diphtheria is rare, it may be assumed that a silent immunization by skin sores contaminated with diphtheria germs takes place. This assumption is supported by an analysis of 30 unimmunized babies aged 6-24 months of whom 10 had protective and 16 low levels of diphtheria antibodies in their sera. By inclusion of 13 further children of the same age group, a geometric mean diphtheria antibody titre for all 43 children of 0.08 I.U./ml was found. (Modified journal abstract)

9590 **Anderson, M.A.** *Health and nutrition impact of potable water in rural Bolivia.* Journal of Tropical Pediatrics (London), 27(1), Feb 1981, 39-46. Engl. 37 refs.

A baseline survey of health and nutrition status involving 221 children aged 6-56 months was undertaken in 10 rural Bolivian villages targeted for the installation of potable water systems. This paper describes the survey methodology and findings. Briefly, the primarily carbohydrate diet (75%) was found to be deficient in calories and high quality protein; 8% of the children were currently malnourished and 36% of them stunted; and gastrointestinal infections were a serious health problem, affecting malnourished children more often than well-nourished children and playing a major role in the aetiology of malnutrition at lower altitudes. Local infant feeding and diarrhea management practices are discussed. Future evaluations will reveal whether a significant health impact can be achieved by the installation of potable water systems accompanied by health education. (HC-L)

9591 **Andrade Barcia, A., Valle Carrera, E.** *Lactancia materna: causas de suspensión en dos ciudades de Ecuador. (Breast-feeding: causes for its discontinuation in two cities in Ecuador).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 91(5), Nov 1981, 408-417. Span. 8 refs.

In August 1979, a total of 962 mothers from two cities in Manabi, Ecuador, whose oldest child was aged at least 3 years and no longer being breast-fed, were surveyed to collect information on infant feeding practices. The results, which are discussed and presented as statistical data, revealed that breast-feeding was widespread (77.5%-88.8%), with mothers aged 20-34 years nursing their infants longer than the recommended 6 months. Since physicians often encouraged substitute feeding practices, they should be part of a health education programme aimed at families at different socioeconomic levels. (Modified journal abstract)

9592 **Arroyave, G., Mejia, L.A., Aguilar, J.R.** *Effect of vitamin A fortification of sugar on the serum vitamin A levels of preschool Guatemalan children: a longitudinal evaluation.* American Journal of Clinical Nutrition (Bethesda, Md.), 34(1), Jan 1981, 41-49. Engl. 18 refs.

Based on the Guatemalan programme of vitamin A fortification of sugar using retinyl palmitate, a longitudinal evaluation on serum retinol levels of preschool children was performed. Five consecutive surveys executed every 6 months evaluated changes in their serum retinol, which after 1 year of fortification were elevated in 76% of the children. The results are discussed and presented as statistical data. (Modified journal abstract)

9593 **Ashley, D.** *Oral rehydration at the Bustamante Hospital for Children.* Cajanus (Kingston, Jamaica), 14(3), 1981, 136-143. Engl.
Caribbean Seminar-Workshop on Diarrhoeal Diseases Control, Kingston, Jamaica, 10-13 Mar 1980.

Oral glucose-electrolyte solution has been widely used and tested in controlled clinical trials and has been proven an effective method of rehydration with acute gastroenteritis. Recent studies at the Bustamante Hospital for Children (Jamaica) further confirmed the utility and safety of the WHO formula in the treatment of acute gastroenteritis and showed that the optimal regime for oral rehydration was this formula used in conjunction with extra plain water. Statistical data are included. (Modified journal abstract)

9594 **Bachtin, M., Nelwan, Supraptо, Sebodo, T., Immongeon** *Use of antibiotics in childhood diarrhea.* Tropical Pediatrics and Environmental Child Health (London), 25(4), Aug 1979, 101-103. Engl. 10 refs.

Antibiotics are often administered in all cases of diarrhea as a matter of course in Indonesian health centres and this has led to an increase in the resistance of bacteria toward many kinds of antibiotics. Of 120 children presenting at a teaching hospital in Indonesia with acute diarrhea, 59 were treated with chloramphenicol, tetracyclin, or aureomycine and 61 without antibiotics. All were given glucose electrolyte solution orally or ringer lactate intravenously to correct dehydration and the duration of diarrhea and hospitalization and body temperatures every 6 hours were recorded. No significant difference in either duration of diarrhea or length of hospital stay could be determined and it is therefore concluded that antibiotics are not generally indicated in acute diarrheal diseases and that maintaining fluid electrolyte balance is the only requirement. Six tables of data are included. (HC-L)

9595 **Rai, K.I., Sastry, V.N., Reddy, P.S.** *Attendance pattern of patients: a study of out-patient attendance and drop-out rates.* Journal of Tropical Pediatrics (London), 27(4), Aug 1981, 226-228. Engl.

A study of socioeconomic status, the purpose of attending the hospital, and the discontinuation of treatment was conducted on 1 000 consecutive children attending a pediatric hospital in Tirupati, India. It was found that the majority belonged to poor socioeconomic groups and most attended the hospital for free treatment or free investigations. Many who discontinued treatment before complete recovery did so out of ignorance; other did so with the idea of employing traditional remedies. Statistical data are included. (Modified journal abstact)

9596 **Baily, G.V.** *Present status of immunisation against tuberculosis.* Indian Journal of Tuberculosis (New Delhi), 28(3), Jul 1981, 117-125. Engl. 23 refs.

The author traces the controversial history of BCG vaccine usage in various parts of the world and reviews some of the studies concerning the protective effect of vaccination against tuberculosis. The methodology and results of the 1963 Chingleput (India) BCG trial are examined, showing that BCG vaccination provided no protection against bacillary pulmonary tuberculosis under controlled conditions. The current status of BCG immunization in India is discussed. Statistical data are included. (DP-E)

9597 **Bairagi, R.** *Is income the only constraint on child nutrition in rural Bangladesh?* Bulletin of the World Health Organization (Geneva), 58(5), 1980, 767-772. Engl. 11 refs.

Also published in French and Spanish.

A study of malnutrition among 517 children in a rural area of Bangladesh during a famine year has shown that seasonal factors, family income, mother's education, and sex and birth order of the children appear to be important determinants of malnutrition. There was also a threshold point below which income appeared as the main constraint on child nutrition. It is thought that a nutrition education programme may be helpful in improving the nutritional status of children from wealthier families. The importance of education of women as a long-term policy is emphasized. Statistical data are included. (Modified journal abstract)

9598 **Ballard, R.C., Fehler, H.F., Baarvelsh, G., Owen, G., Sutter, E.E.** *Epidemiology and geographical distribution of trachoma in Lebowa.* South African Medical Journal (Cape Town), 60(14), 3 Oct 1981, 531-535. Engl. 13 refs.

The prevalence of active trachoma and its potentially blinding sequelae have been estimated in 10 settlements scattered throughout rural Lebowa, South Africa. The disease represents a major public health problem only in northern Lebowa where 25% of people aged more than 60 years were found to be suffering from visual disability as a result of the infection. Although the disease is endemic in most other parts of Lebowa, it rarely causes blindness and impaired vision. A rational approach to the control of trachoma that takes into account both local considerations and recent advances in the knowledge of the epidemiology of the disease is recommended. Statistical data are included. (Modified journal abstract)

9599 **Barbosa, F.S., Costa, D.P.** *Long-term schistosomiasis control project with molluscicide in a rural area of Brazil.* Annals of Tropical Medicine and Parasitology (Liverpool, U.K.), 75(1), 1981, 41-52. Engl. Refs.

A long-term controlled field experiment is described from northeastern Brazil in which the molluscicide Bayluscide was used as the sole means of control against *Schistosoma mansoni* infection. Bayluscide was effective in the reduction of all the parameters used for evaluation of the disease; a less pronounced reduction of the same parameters was seen in the untreated areas. Comments are made on the use of molluscicides and on the present situation in schistosomiasis control in the social and economic context of northeastern Brazil. Statistical data are included. (Modified journal abstract)

9600 **Bobbs, W., Lombardi, C.** *Incidencia da hanseniase no estado de São Paulo em 1978. (Incidence of leprosy in São Paulo state in 1978).* Hansenologia Internationalis (São Paulo, Brazil), 4(2), 1979, 98-112. Portuguese. 10 refs.

The authors describe and evaluate the distribution of 2 081 new cases of leprosy recorded in the state of São Paulo (Brazil) in 1978, according to the following personal characteristics of the patient: sex, age, place of birth, education level, and housing. The distribution of the cases according to some characteristics related to the disease and to health care are also described and discussed: clinical types of the disease, duration of the disease, occasion and manner in which the patient sought health care. The geographic distribution of cases and the

secular trend of new cases recorded in the last 10 years are also examined. (Modified journal abstract)

9601 **Berning, H.** *Chagas-Krankheit und ihre Bedeutung für Mittel- und Südamerika. (Significance of Chagas' disease for Central and South America).* Muenchener Medizinische Wochenschrift (Munich, Germany FR), 123(1), 1981, 23-26. German. 33 refs.

In 1960, a WHO commission estimated that approximately 7 million people in Central and South America were afflicted by Chagas' disease, with 25 million at risk. This article is based on findings by the author in his research carried out in Venezuela during 1951-1954 and 1970-1979. A brief history of the disease and a description of its epidemiological aspects are presented. A rare occurrence, acute Chagas' infection, resulting from *Trypanosoma cruzi* in the blood stream, is found mainly in children in the 1st years of life and has a mortality of 10%. More common is chronic Chagas' disease, which has an asymptomatic phase of 10-20 years and often results in Chagas-myocarditis. A breakthrough in the search for effective treatment came in 1968 with the introduction of a 90-day therapy with a nitrofurfurylidene preparation, making possible the elimination of trypanosomes found in both blood and tissues. (EB)

9602 **Barry, R.J., Greeley, M.** *Diarrhoeal disease in Aboriginal and non-Aboriginal infants and young children in western Australia.* Medical Journal of Australia (Sydney), 1(9), 2 May 1981, 479-482. Engl. 16 refs.

From 1971-1978, there were remarkable differences in the rates of admission to hospital for gastroenteritis of Aboriginal and non-Aboriginal infants and children in western Australia. Although Aborigines made up only 3.7% of the population in 1976, they accounted for 42% of the admissions and 58% of the bed occupancy for that disease. There has been an encouraging decline in deaths from diarrheal disease and in hospital admission rates among young Aborigines, but a wide gap still exists. Statistical data are included. (Modified journal abstract)

9603 **Bhavsar, B.S., Mehta, N.R.** *Assessment of school survey as a method of detection of leprosy cases.* Leprosy in India (New Delhi), 53(4), Oct 1981, 620-625. Engl. 16 refs.

During September 1976-February 1978, 26 cases of leprosy were detected in examinations of 21 412 students aged 5-19 years attending 30 urban and 25 rural schools in the Surat district, India. The prevalence rate was 0.12%. A matched control group consisting of healthy classmates was selected using certain criteria, such as socioeconomic status and home sanitary conditions. Home visits paid to 24 cases and their controls revealed a positive family history in 12 (50%) of the affected students. Record analysis showed that, of the detected cases in the rural and urban areas, only 32.6% and 30.5% respectively were attending school. It was felt that, while such school and contact surveys are unable to detect all cases of child leprosy in the community, they can supplement routine community surveys. (EB)

9604 **Bhavsar, B.S., Mehta, N.R., Purohit, C.K.** *Prevalence of skin diseases in various socio-economic classes — results of school survey in Surat District (Gujarat).* Indian Journal of Medical Sciences (Bombay, India), 35(1), Jan 1981, 1-4. Engl.

From September 1976-February 1978, a study of 19 775 children attending 30 urban and 25 rural schools in the Surat district in South Gujarat, India, was carried out to measure the degree of association between prevailing skin diseases among schoolchildren and their socioeconomic status. The level of skin diseases of relatively low infectivity increased with the improvement of socioeconomic status and the increased use of cosmetics, perfumes, deodorants, and synthetic clothing. Prevalence of the more infectious diseases, such as scabies, leprosy, and pyoderma, increased with the decline in socioeconomic status. Tinea versicolour occurred infrequently in all socioeconomic classes. Statistical data are included. (EB)

9605 **Bisserra, J.F., Gazzana, M.B., Costa, C.H., Mello, D.A., Marsden, P.D.** *Survey of what people know about Chagas' disease.* World Health Forum (Geneva), 2(3), 1981, 394-397. Engl.

In 1980, the inhabitants of two villages and scattered farmhouses in Brazil were surveyed on their knowledge of Chagas' disease and the medical services available to them. The results are discussed and presented as statistical data. The findings indicated that the people recognized the need for spraying but had not purchased a sufficient quantity of pesticides. Cleaning houses was not seen as important, but there had been a sharp increase in the plastering of walls. A special education programme is recommended. (DP-E)

9606 **Black, R.E., Merson, M.H., Taylor, P.R., Yolken, R.H., Yunus, M.** *Glucose vs. sucrose in oral rehydration solutions for infants and young children with rotavirus-associated diarrhea.* Pediatrics (Springfield, Ill.), 67(1), Jan 1981, 79-83. Engl. 13 refs.

The use of oral rehydration solutions containing essential electrolytes and either glucose or sucrose of equal osmolality was compared in a double-blind sequential trial of 784 children with rotavirus-associated diarrhea treated at a centre in rural Bangladesh. The oral fluid failure rate was 11.5% for the sucrose-containing solution group and 7.3% for the glucose-containing group. Vomiting was a significantly more common cause of failure for the group treated with sucrose-containing oral rehydration solution and was associated with an increased rate of intake of the sweeter sucrose-containing solution. Statistical data are included. (Modified journal abstract)

9607 **Benjouh, A., Essalhi, M., Jeddi, M., Kapikian, A.Z., Mahraz, H.** *Gastro-entérites à rotavirus en Tunisie. (Gastroenteritis associated with rotavir-*

us in Tunisia. Médecine et Maladies Infectieuses (Paris), 11(3), 1981, 187-190. Fren.

With an aim to determining to what extent rotavirus and pathogenic bacteria were the cause of infant gastroenteritis, a study of stool samples from 98 Tunisian infants and children (aged 15 days-14 years) was carried out from June-October 1975. The methods and results are discussed with the use of three tables. The following pathogenic agents were isolated: rotavirus in 6 cases, pathogenic bacteria in 20 cases (9 *Salmonella wien*, 10 *Escherichia coli* and 1 *Pseudomonas*) and rotavirus and pathogenic bacteria in 4 cases (3 *S. wien* and 1 *E. coli*). The occurrence of undernourishment, dehydration, and toxic syndrome was also taken into account. The findings of the present study differ from those of studies in other temperate zones where rotavirus is more frequent in the cold season. (EB)

9608 **Bouhabbal, F., Khaled, S., Chaulet, P.** *Enquete nationale sur les résultats du traitement de la tuberculose pulmonaire. resultats bactériologiques* (*National survey on pulmonary tuberculosis treatment: bacteriological results*). Archives de l'Institut Pasteur d'Algérie (Alger), (53), 1978-1979, 186-200. Fren. 15 ref.

This article reports the bacteriological results of a 1977 national survey of the treatment of pulmonary tuberculosis carried out in 11 districts of Algeria. At the end of 12 months of treatment, the condition of 981 patients (55% of the original 1 795 patients registered) was reviewed; of these, 122 (12%) were still excreting tubercule bacilli. In 51 of 63 cultures tested for sensitivity, drug resistance to at least one drug was found. Test methodology and 12 tables of data from the study are presented and discussed. It was apparent that the quality of treatment and disease management varied considerably from area to area, or even within the same area. (EB)

9609 **Bradley, A.K., Gilles, H.M.** *Malumfashi Endemic Diseases Research Project XVII. a knowledge-attitude-practice survey on perception of disease and fertility*. Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(6), 1981, 581-590. Engl. Refs.

A knowledge-attitude-practice survey was undertaken in 1977 on a random sample of 255 mothers of children in the malaria study of the Endemic Diseases Research Project at Malumfashi, northern Nigeria. Attention was directed at important illnesses prevalent in the community and at factors related to fertility. Treatment for common conditions was a mixture of traditional and Western, although what little knowledge existed about the prevention of diseases emphasized Western techniques. Some foods that Western teaching considers important were not so regarded, but reliance on guinea-corn meant that most nutritional needs were met. Statistical data are included. (Modified journal abstract)

9610 **Buchan, T., Nyamuswa, R.L., Futter, G.E.** *Community psychiatric services in Mashonaland, Zimbabwe*. Central African Journal of Medicine, 27(6), Jun 1981, 111-116. Engl. Refs.

Four hundred and eighty-five of 503 psychiatric admissions from February 1-May 21, 1980, at Harare Hospital, Zimbabwe, are analyzed in terms of demographic (sex and marital status, age and employment status, religion) and clinical features, including presenting symptoms, diagnostic categories, and outcome. Suggestions are made for improving the community's facilities for treating psychiatric patients, particularly on the primary care level. (DP-E)

9611 **Bunnag, B., Soranussi, S., Impand, P., Harinsuta, C.** *Potential health hazards of the water resources development: a health survey in the Phitsanulok Irrigation Project, Nan River Basin, northern Thailand*. Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 11(4), Dec 1980, 559-565. Engl. 10 refs.

A survey of 33 villages was made to collect baseline data on health conditions in an area intended to be developed as the Phitsanulok Irrigation Project in the Nan River basin in northern Thailand. Of 659 males and 840 females examined, 69% had had noteworthy gastrointestinal attacks at some time and 23.3% had experienced itching, presumed due to cercarial attack, after working in rice fields. Oral conditions including dental caries and pyogingivitis affected 16.9%. Of 1 298 stool samples examined, 45% contained hookworm ova, 96% of which were *Necator americanus*, and 20% had eggs of *Opisthorchis viverrini*. It is thought that opisthorchiasis and leptospirosis may become serious health problems in the future. Statistical data are included. (Modified journal abstract)

9612 **Burgess, P.J.** *Observations on hospital practice in Nepal and a survey of osteomyelitis and bone tuberculosis*. Tropical Doctor (London), 12(1), Jan 1982, 23-27. Engl.

A British doctor describes his 2-month experience at the United Mission Hospital, Tansen, Nepal, a 100-bed hospital that also serves as a base for an expanding community health programme of maternal child health clinics and as a training centre for community medical assistants and assistant nurse-midwives. In addition to observing general disease patterns, the author collected data on the incidence of osteomyelitis and bone tuberculosis that are presented in this article. (DP-E)

9613 **Burney, M.I., Lari, F.J., Khan, M.A.** *Status of visceral leishmaniasis in northern Pakistan, a sero-epidemiological assessment*. Tropical Doctor (London), 11(4), Oct 1981, 146-148. Engl. 13 refs.

A 1979 survey of Baltistan, Pakistan, revealed that the area is now free of leishmaniasis. The results of an immunological screening are discussed and presented as statistical data. (DP-E)

9614 **Cánovas Cervera, S.** *Incidencia de las diferentes causas de muerte en los niveles de mortalidad de la población en Cuba. (Incidence of different causes of death at various ages in the Cuban popula-*

tion. Revista Cubana de Administración de Salud (Havana), 7(3), Jul-Sep 1981, 233-253. Span.
Segundo Congreso Nacional de Administración de Salud, Cienfuegos, Cuba, 2-4 Oct 1980.

Mortality data for three regions of Cuba — characterized by a young, intermediate, and older population, respectively — are presented and analyzed by cause of death. The effect of eliminating each cause on life expectancy at birth and every 5 years thereafter is then calculated. It is noted that the elimination of infectious diseases — most important among the youngest population — would result in an overall gain in life expectancy at birth of less than 1 year, whereas the elimination of accidents — most important among the older population — would result in an overall gain of almost 2 years. The usefulness of this type of investigation in determining health priorities is pointed out. (HC-L)

9615 **Chabasse, D., Dumas, H., Toumbara, A., Maiga, A., Rangue, P.** *Indices paludométriques chez 938 enfants et adolescents en savane humide au sud du Mali* / *Paludometric survey of 938 children and youths in a humid savanna area of south Mali*. Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 73(3), 1980, 254-258. Fren.

A paludometric survey of 938 children and youths aged 6-18 years in the Kadiolo area, a humid savanna in South Mali, was undertaken at the end of the dry season, in early March 1978. The epidemiological findings are tabulated and discussed, showing an infestion rate of 70.5% (662 cases of malaria) with 94.4% (625 of 662 cases) of *Plasmodium falciparum*, 6.2% (41 cases) of *P malariae*, and 3.6% (24 cases) of *P ovale*. It is further pointed out that the annual transmission of malaria appears continuous and that the use of nivaquine may provide the population with some protection against the risks of the disease. (EB)

9616 **Chaudhary, R.C.** *Clinico social study of leprosy cases in a rural population of Rajasthan*. Leprosy in India (New Delhi), 53(2), Apr 1981, 259-265. Engl. 12 refs.

A leprosy prevalence of 0.5:1 000 was found in a community survey of 92 villages (population 62 142) in western Rajasthan, India. Possible cases for examination were identified by enquiries made of heads of households. Disease classification, age distribution, social class, contact history, and other clinical data are discussed. Most cases were aged more than 40 years and only 22.6% reported a history of contact with afflicted family members. Statistical data are included. (Modified journal abstract)

9617 **Chaumont, A.K., Fenwick, A.** *Human excretion behaviour in a schistosomiasis endemic area of the Gezira, Sudan*. Journal of Tropical Medicine and Hygiene (London), 84(3), Jun 1981, 101-107. Engl. 9 refs.

A 12-month study of excretory behaviour of resident and migrant workers was undertaken in the fields of the Gezira Irrigation Scheme, Sudan, in order to shed light on the transmission of schistosomiasis. The study revealed that most excretory acts took place away from the canals, privacy being a more important consideration than the proximity of water for ablution, and it is concluded that only limited regular contamination with *Schistosoma mansoni* eggs is occasioned by present excretory practices. (HC-L)

9618 **Chen, X., Tong, X., Yu, X., Liu, S., Lin, H.** *Pellagra prevention*. Chinese Medical Journal (Beijing), 93(11), Sep 1980, 785-787. Engl.

In this 40-day Chinese study, 30 male and 8 female peasants were divided into four dietary groups who consumed opaque-2 maize, conventional maize, conventional maize plus 6% sodium carbonate, and conventional maize plus 10% soybeans respectively. These diets were then evaluated in terms of protein and niacin; the results are discussed and presented as statistical data. It is recommended that animal husbandry be encouraged in all areas where pellagra is endemic to increase the production and therefore consumption of meat, milk, and milk products as a long-term project. However, encouraging the planting of opaque-2 maize or adding 10% soybeans to a conventional maize meal would supply enough niacin and may be the simplest and most economical way to fight pellagra at present. (Modified journal abstract)

9619 **Chippaux, A., Chippaux-Hyppolite, C., Monteny-Vandervorst, N., Soudonnière-Duprez, D.** *Diagnostic de plusieurs cas de fièvre jaune en zone d'emergence endémique en Côte-d'Ivoire* / *Diagnosis of yellow fever cases in an endemic area in the Ivory Coast*. Médecine Tropicale (Marseilles, France), 41(1), Jan 1981, 53-61. Fren. 11 refs.

This document reports on the findings of an epidemiological survey carried out on 532 inhabitants in an endemic area of northwestern Ivory Coast during October-December 1977. Haemagglutination-inhibition, complement-fixation, and neutralization tests were performed with six flavivirus antigens, i.e., yellow fever, Wesselsbron, West Nile, Ntaya, Uganda S., and Zika. Criteria for diagnosis are presented and the clinical, epidemiological, and serological results are discussed with the use of three tables. Twenty-one (3.9%) definite and 20 (3.7%) probable cases of yellow fever were found, with 15 (2.8%) cases being inconclusive. The authors also look at some specific problems in retrospective diagnosis of yellow fever in flavivirus endemic areas. (EB)

9620 **Chuke Ejezie, G., Ade-Serrano, M.A.** Schistosoma haematobium *in Ajara community of Badagry, Nigeria; a study on prevalence, intensity and morbidity from infection among primary school children*. Tropical and Geographical Medicine (Haarlem, Netherlands), 33(2), Jun 1981, 175-180. Engl. 15 refs.
See also entry 9621.

A comprehensive medical examination, including urinalysis, was carried out on 681 rural schoolchildren in a village in Badagry, Nigeria, in order to determine the prevalence, intensity, and clinical manifestations of

Schistosoma haematobium infection. The overall prevalence rate was 23.7%, the spleen rate was 20.9%, and the mean egg count was low (435 ova:10 ml urine). Higher egg counts were associated with heavier haematuria and proteinuria, but the intensity of infection had no bearing on anthropometric measurements for age, school attendance and performance, or anaemia. It is tentatively concluded that *S. haematobium* infection incurs minimal morbidity in this area but that longer-term observation is necessary for a more definite assessment. (HC-L)

9621 **Chuka Ejenie, G., Ade-Serrano, M.A.** Schistosoma haematobium *in Ajara community of Badagry: metrifonate trials in the treatment of the disease*. Tropical and Geographical Medicine (Haarlem, Netherlands), 33(2), Jun 1981, 181-184. Engl. 14 refs.
See also entry 9620.

One hundred and forty-five *Schistosoma haematobium* infected Nigerian schoolchildren were treated with metrifonate (administered orally at a dose of 10 mg/kg body weight in 3 doses at 14-day intervals) and the effect on egg output, haematuria, and proteinuria was observed. At 4 weeks, 100% of the children with light infections, 91.2% with moderate infections, and 86% with heavy infections had ceased to excrete eggs in the urine. Some of these, however, continued to pass blood and protein and it is therefore concluded that haematuria and proteinuria are sensitive indicators of both the intensity of infection and the results of chemotherapy. (HC-L)

9622 **Clarke, M., Schild, G.C., Bouttrel, J., McGregor, I.A., Williams, K.** *Epidemiological studies of rubella virus in a tropical African community*. Bulletin of the World Health Organization (Geneva), 58(6), 1980, 931-935. Engl. 20 refs.
Also published in French and Spanish.

The single-radial-haemolysis test for antibody to rubella virus provides a simple, rapid method for carrying out large serological surveys. The availability of a collection of sequential survey samples from inhabitants of two Gambian villages made it possible to determine the pattern of rubella epidemics in these communities between 1966-1976. The findings indicated that an epidemic had occurred in 1963-1964; there was no further evidence of rubella infection until 1973, when a large-scale epidemic occurred. Although the communities were monitored throughout the period of the study, there was no clinical evidence of infection and no documented case of congenital rubella syndrome. Statistical data are included. (Modified journal abstract)

9623 **Collins, R.F., Edwards, L.D.** *Prevalence of intestinal helminths and protozoans in a rural population segment of the Dominican Republic*. Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 75(6), 1981, 549-551. Engl.

Fecal specimens from 453 individuals inhabiting six villages in the Dominican Republic were examined for parasites in this June 1977 study. The results are discussed and presented as statistical data. *Ascaris*, *Trichuris*, hookworm, *Enterobius*, *Giardia*, and *Entamoeba coli* were found. Factors that could have affected the prevalence of the various parasites are also considered. (Modified journal abstract)

9624 **Cross, J.H., Basaca-Sevilla, V.** *Intestinal parasitic infections in Southeast Asia*. Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 12(2), Jun 1981, 262-274. Engl. Refs.

This paper summarizes surveys carried out in Indonesia and the Philippines during which stools were examined for parasites and sera were tested for antibodies to *Entamoeba histolytica*. Sixteen protozoan, 46 helminth, and 4 arthropod parasites were recorded. The commonest parasites were *Trichuris*, *Ascaris*, hookworm, and *Entamoeba coli*. Much information on the prevalence of the parasites is given and statistical data are included. (Modified journal abstract)

9625 **Dale, P.W.** *Prevalence of schizophrenia in the Pacific Island populations of Micronesia*. Journal of Psychiatric Research (Oxford, UK), 16(2), 1981, 103-111. Engl. 9 refs.

A study of the prevalence of schizophrenia in Micronesia's eight cultures showed that there were no cases in the islands settled in prehistoric times by the Polynesians, only a few cases and a low prevalence (1:1 000 adults) in the remote eastern islands, and a high prevalence (8:1 000 adults) in the western islands. The author maintains that the study therefore demonstrates that schizophrenia is not a universal infliction of mankind. Statistical data are included. (Modified journal abstract)

9626 **Das, N.C., Rawat, S., Trivedi, G.K., Joshi, V.K., Rao, C.K.** *Prevalence of intestinal parasites in Jamnagar and Okha towns — Gujarat*. Journal of Communicable Diseases (New Delhi), 13(1), 1981, 67-70. Engl.

As part of a survey of the prevalence of intestinal parasites in Okha and Jamnagar (Gujarat, India), 168 stool specimens were collected and analyzed. The results are discussed and presented as statistical data. In Okha, the prevalence of parasites was 70.8%, while in Jamnagar it was 66.1%, although in the latter town that of ascariasis was some 15% greater. These rates were comparable to or lower than those reported in urban populations from other areas of the country. (DP-E)

9627 **Dutta, K.K., Sharma, R.S., Ranach, P.M., Ghosh, T.K., Arora, R.R.** *Morbidity pattern among rural pregnant women in Alwar, Rajasthan — a cohort study*. Health and Population — Perspectives and Issues (New Delhi), 3(4), Oct-Dec 1980, 282-292. Engl.

A cohort morbidity study of 281 rural women (349 pregnancies) in Alwar, Rajasthan, India, revealed a maternal mortality of 5.92:1 000 live births, abortion rates of 28.65:1 000 pregnancies and 29.56:1 000 live births,

and a stillbirth rate of 2.96:1 000 live births. For each maternal death there were 60 illness episodes; morbidity also increased with higher parity and was more common during the 1st trimester and the puerperium. Complications of pregnancy, childbirth, and the puerperium were the major causes of morbidity among pregnant women. Statistical data are included. (Modified journal abstract)

9628 **De Schampheleire, I.** *Integrated family planning activities in maternal and child health centres in Cap Bon, Tunisia; part III: impact on some maternal and child indicators.* Journal of Tropical Pediatrics (London), 27(6), Dec 1981, 304-307. Engl. 20 refs.

Duration of breast-feeding and birth spacing are two health indicators used to evaluate the impact on maternal child health of the family planning programme introduced in Cap Bon, Tunisia. The results are discussed and presented as statistical data. It was found that the 279 mothers using contraception weaned their children significantly later than those in the general population, while the intervals between their pregnancies were also longer, amounting to more than 5 years for the 60% using the IUD. (DP-E)

9629 **Dubuye, P., Robyn, C.** *Breast-feeding and post partum amenorrhoea in Central Africa; 2: prolactin and post partum amenorrhoea.* Journal of Tropical Pediatrics (London), 26(5), Oct 1980, 184-189. Engl. 17 refs.

See also entry 9662.

A study of serum prolactin levels in rural and urban nursing women 0-24 months postpartum was undertaken in the highlands of Kivu, Zaire. Prolactin levels of nursing women were much higher than those in a group of male and non-lactating female controls. Mean prolactin levels were statistically lower in nursing mothers who had resumed menstruation than in those who had not. Serum prolactin levels were the same among rural and urban women for the 1st 6 months but began to decline in urban women thereafter, due to earlier decrease in the frequency of daily feedings. It is therefore concluded that hyperprolactinaemia and associated amenorrhea are maintained by frequent breast-feeding and that it is not only the duration, but also the mode of nursing, that constitutes protection against pregnancy. Six tables of data are included. (HC-L)

9630 **Dossi, I.D., Garcia Tavares, M.L., Dutra de Oliveira, R.S., Dossi, M.E., Cevallos Romero, L.S.** *Anthropometric and cycloergometric assessment of the nutritional status of the children of agricultural migrant workers in southern Brazil.* American Journal of Clinical Nutrition (Bethesda, Md.), 34(9), Sep 1981, 1925-1934. Engl. 13 refs.

In this survey of the food habits and nutritional status of Boia-Fria agricultural migrant workers in southern Brazil, a special project was undertaken to assess the influence of socioeconomic and dietary deprivation on the physical growth and development and physical performance of 455 children. For comparison, 475 children from a private school attended primarily by children of well-to-do families were also examined for body weight, standing height, mid-upper arm circumference, and head circumference. The results, discussed and presented as statistical data, indicated that the former group was significantly lower in development, probably because of poor dietary habits and socioeconomic deprivation. (Modified journal abstract)

9631 **Devadas, R.P., Kamalanathan, C., Vijayalakshmi, P.** *Leaf protein feeding trials with preschool children at Coimbatore; III: composition and nutritive value of the various supplements based on their home diets.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 18(4), Apr 1981, 323-327. Engl.

After a food weighment survey conducted in six villages in Coimbatore, India, revealed the protein and calorie inadequacies of the diet of local preschool children, a basic diet based on low-cost, locally available foods and providing 992 daily calories was devised and fed to a control group. As an experiment, cassava supplement added 300-500 calories to this diet and 300-500 extra calories were provided by skim milk, leaf protein, horsegram, or one of two cereal pulse mixtures. The nutritional values of these diets are discussed and presented as statistical data. (DP-E)

9632 **Dissaneva, R., Kirtiputra, N., Laoyavanija, U.** *Risk factors for chronic disease in Thai schoolchildren.* Preventive Medicine (New York), 10(2), 1981, 226-234. Engl.

In June and July 1979, 1 090 students from five Bangkok schools participated in the Thai "Know Your Body" programme. The findings of the associated physical examinations are discussed and presented as statistical data. It was found that mean total cholesterol for all students was 167 mg:dl (171.5 for girls and 162.5 for boys); 29.2% had cholesterol values equal to or greater than 180 mg:dl; 5.7% were overweight (greater than 120% of their ideal weights); 0.2% had blood pressure equal to or greater than 140/90 mm Hg; and only 2.6% reported being smokers. (Modified journal abstract)

9633 **El Karim, O., Salih, M.A.** *Morbidity and mortality from measles in an urban community of the Sudan.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(2), 1981, 227-230. Engl. Refs.

With an aim to examining measles morbidity and mortality in a developing country, this paper gives an account of the 183 cases admitted to El Buluk Hospital in Khartoum, Sudan, from January 1975-December 1976. The disease, affecting mainly children aged 1-3 years, had a relatively low fatality rate (4.9%) but high morbidity, with the most frequent complication being bronchopneumonia (73.8%) followed by purulent conjunctivitis and dehydration from diarrhea and vomiting. Season variation was apparent in 1976 with the number of cases reaching a peak during the dry period from April-June. The findings are compared to those of other reports from India and Africa. (EB)

9634 **El-Mougi, M., Mostafa, S., Osman, N.H., Ahmed, K.A.** *Social and medical factors affecting the duration of breast feeding in Egypt.* Journal of Tropical Pediatrics (London), 27(1), Feb 1981, 5-11. Engl. 14 refs.

This paper presents copious data on the results of a survey of breast-feeding in Egypt among 300 urban poor, 104 traditional rural, and 100 urban elite mother-child pairs. Duration of breast-feeding was longest for the traditional rural mothers, followed by the urban poor and urban elite. Earlier weaning was associated with high *per capita* income, higher education, working outside the home, hospital delivery, and scheduled (as opposed to on-demand) feeding. The main reason for weaning among the traditional rural and urban mothers was pregnancy and, among the urban elite, the effects of contraceptive pills. It is suggested that health professionals take a more active role in encouraging breast-feeding and that hospital routine be modified to accommodate it. (HC-L)

9635 **Elkashlan, K.M., Khedr, M.S., Soliman, E.A.** *Factors governing the use of child health services in suburban area in Egypt.* Journal of the Egyptian Public Health Association (Cairo), 55(1/2), 1980, 37-45. Engl.

From July 1978-March 1979, 3 430 mothers of children aged less than 5 years in suburban Zefta, Egypt, were interviewed to collect data on their ages, education, number of children, and distance from the local maternal child health centre and to assess their knowledge of immunization and child care. The results are discussed and presented as statistical data. This information was then analyzed to see which factors influenced the utilization or non-utilization of available maternal child health services. It was found that the 32.7% of the sample classified as users had significantly higher levels of education and income, were younger and closer to the centre, and had more preschool children and a better understanding of child health. (DP-E)

9636 **Epidemiological Bulletin, Washington, D.C.** *Acute communicable diseases in Chile, 1980.* Epidemiological Bulletin (Washington, D.C.), 2(4), 1981, 13-15. Engl.

The epidemiological characteristics of communicable diseases in Chile have changed only slightly in the past 5 years. The only disturbing increase has been in the incidence of typhoid fever, which in 5 years has almost doubled, with a rate in 1980 of about 100:100 000. In spite of relatively good hygiene in the capital, the rate there in 1980 was 159:100 000 compared with 97.6:100 000 for the entire country. Diphtheria, whooping cough, and measles declined in 1980, but this may be due in part to periodic epidemic fluctuations. Venereal disease levels are relatively stable. The last reported case of human rabies occured in 1975 and animal rabies is now found only sporadically in very restricted geographical areas. (DP-E)

9637 **Ezimokhai, M., Ajaiyeoba, L.N., Jackson, M., Izilien, M.I.** *Response of unmarried adolescents to contraceptive advice and service in Nigeria.* International Journal of Gynaecology and Obstetrics (Amsterdam), 19(6), Dec 1981, 481-485. Engl. 14 refs.

The response of 91 unmarried, sexually active teenagers to offers of a birth control service were assessed in a prospective study at the University of Benin Teaching Hospital (Nigeria) from June 1978-December 1980. Their default rate was very high (43%), especially among users of oral contraceptives; the intrauterine device (IUD) and injections of norethisterone enanthate both seemed more acceptable. Possible reasons for this pattern of response are discussed and the authors suggest that consideration should be given to making the IUD more suitable for and acceptable to teenagers in developing countries. Statistical data are included. (Modified journal abstract)

9638 **Fagundes-Neto, U., Barazzi, R.G., Webba, J., Silvestrini, W.S., Batista Morais, M.** *Observations of the Alto Xingu Indians (central Brazil) with special reference to nutritional evaluation in children.* American Journal of Clinical Nutrition (Bethesda, Md.), 34(10), Oct 1981, 2229-2235. Engl. 26 refs.

In three 1974-1976 studies in Xingu National Park, Brazil, the nutritional status of 175 native Indian children aged less than 5 years was studied both cross-sectionally and longitudinally. Weight-for-height measurements revealed that 96.0% were well-nourished, 3.4% had 1st degree malnutrition, and 0.6% had 2nd degree malnutrition; measurement of arm-circumference-for-height revealed rates of 97.1% well-nourished and 2.9% malnourished. A longitudinal study of height was also conducted to eliminate the possibility of stunting. In contrast to children from low-income families living in the outskirts of large urban centres, the Indians remain as healthy as they were when last examined 30 years ago. Statistical data are included. (Modified journal abstract)

9639 **Falk, W., Hammer, E.** *BCG-Impfung und manifeste Tuberkulose-Erkrankung (BCG vaccination and manifestation of active tuberculosis).* Fortschritte der Medizin (Munich, Germany FR), 99(25), 1981, 991-994. German.
Conference of the German Society for Social Pediatrics, Munich, Germany FR, July 7, 1980.

With an aim to determining the manifestations of tuberculosis (TB) in BCG-vaccinated children, the authors examined the records of the 172 infants and children who received treatment for TB at the clinic of the University of Graz, Austria, from January 1968-August 1980. The case histories of 10 previously vaccinated children who developed TB are discussed and a number of conclusions and recommendations are presented. These include: the need to consider a possible diagnosis of TB in BCG-vaccinated children who show symptoms of disease of uncertain aetiology or who are in contact with a person with active TB; the importance of vaccination renewal;

consideration of possible immune defects; and importance of proof and typing of the tubercule bacillus in diagnostic procedures. (EB)

9640 **FAO, Rome.** *Economic value of breast-feeding.* Rome, FAO, FAO Food and Nutrition Paper, No. 11, 1979. 89p. Engl. Refs.

The purpose of this 1977 FAO project was to examine the declining use of mother's milk in developing countries and to develop a theoretical model to illustrate the economic value of breast-feeding. The two representative countries chosen for study were the Ivory Coast and Ghana. An investigation was undertaken into the advantages and disadvantages of breast-feeding and artifical feeding methods, their health-producing and harmful effects, and the cost of goods and time. The results of the analysis of data at the individual and national levels for both countries and a number of conclusions are presented. The report recommends that the highest possible priority be assigned to the promotion of breast-feeding. Numerous graphs and tables of data from the study and a copious bibliography are included. (EB)

9641 **Ferreira Candeias, N.M.** *Assistência pré-natal: conhecimentos, atitudes e práticas de mulheres internadas no serviço de obstetrícia de um hospital do município de São Paulo, Brasil. (Antenatal care: knowledge, attitudes, and practices of hospitalized women in the obstetric service in a hospital of the municipality of São Paulo, Brazil).* Revista de Saúde Pública (São Paulo, Brazil), 14(4), Dec 1980, 427-438. Portuguese. 19 refs.

This paper presents and discusses the results of interviews with 404 obstetric patients in São Paulo, Brazil, regarding the importance of antenatal care, initiation of antenatal care, number of antenatal consultations attended, reasons for not seeking antenatal care, travelling time to clinic, waiting time at clinic, and preferred sex of doctor. The response indicated a considerable gap between knowledge and practice, especially pronounced among adolescent mothers, and an over-representation of high-risk pregnancies (68%) in the group receiving no antental care at all (20% of the total). Because the majority of women in all age groups prefer to be attended by female personnel, greater deployment of women doctors is urged. (HC-L)

9642 **Florencio, C.A.** *Comparison of the determinants of nutrient intake of rural and urban families.* Ecology of Food and Nutrition (London), 10(2), 1980, 97-104. Engl. 18 refs.

A study of the effect on nutrient intake of education, family size, food expenditure, employment status of mother, and time agent in food preparation was undertaken in the Philippines with respect to 97 rice farming and 100 urban households. The diet ratings of the rural families were found to be significantly affected by all five variables, family size negatively and the others positively. Only three factors significantly affected the diet rating of the urban families: food expenditure and food preparation time positively and mothers' employment negatively. Possible explanations for these phenomena are discussed. (HC-L)

9643 **Flores, M.E., López, M.E., Santisteban, I., Céspedes, C. de** *Epidemiología del bocio endémico en Costa Rica. (Epidemiology of endemic goitre in Costa Rica).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 91(6), Dec 1981, 531-539. Span. 14 refs.

A 1979 epidemiological study in Costa Rica that examined 5 601 school children of both sexes aged 5-15 years from both rural and urban areas revealed a goitre incidence of 3.5%. The results are discussed and presented as statistical data. This substantial improvement compared to the results of two earlier studies (1952-1955 and 1969) is attributed to the national iodized salt programme launched in 1971. (Modified journal abstract)

9644 **Fofana, Y., Ehrengut, W., Koch, I., Allerdist, H., Diallo, D.** *Immunité antipoliomyélitique des enfants au Mali avant et après deux vaccinations orales contre la poliomyélite. (Antipoliomyelitic immunity in children in Mali before and after two oral immunizations against poliomyelitis).* Médecine Tropicale (Marseilles, France), 41(2), Mar-Apr 1981, 151-155. Fren. 14 refs.

Seventy-nine Mali children aged 3 months-7 years were tested for poliomyelitis antibodies before and after a large dose (equivalent to 2-3 normal doses) of live oral vaccine. Prior to vaccination, approximately half of the children aged less than 3 years and all the children aged 3-7 were seropositive for at least one of the three strains of poliomyelitis. One large dose of vaccine resulted in seroconversion rates of 79%, 74%, and 56% for strains I, II, and III, respectively, among the younger group and 85%, 93%, and 81% among the older group. A 2nd dose brought about rates of 86% for strains I and II and 64% for strain III in the younger group and 100% for strains I and II and 96% for strain III in the older group. It is therefore concluded that in spite of concerns about the cold chain and interference from wild poliomyelitis virus harboured by some children, Sabin vaccine is quite effective under tropical conditions. Also, given the ravages of poliomyelitis in these countries, its use in the large dose is strongly recommended. (HC-L)

9645 **Fourie, P.B., Austeker, L.H.** *Tuberculosis prevalence survey in the Daveyton (Benoni) urban black community.* South African Medical Journal (Cape Town), 60(2), Jul 1981, 64-67. Engl.

A sample of 2 087 urban blacks from Daveyton, Transvaal, South Africa, randomly selected to fully represent the parent community, was investigated for bacteriological prevalence of chest abnormalities associated with tuberculosis among adults, as well as for hypersensitivity to tuberculin in children. Radiological evidence of tuberculosis lesions was demonstrated in 4.8% of subjects, half of whom were regarded as active cases. In the light of a bacteriological prevalence of 0.7%, the radiological prevalence may be an overestimate. Statistical data are included. (Modified journal abstract)

9646 **Frerichs, R.R., Becht, J.M., Foxman, B.** *Screening for childhood malnutrition in rural Bolivia.* Journal of Tropical Pediatrics (London), 27(6), Dec 1981, 285-291. Engl. 15 refs.

Height, weight, and mid-upper arm circumference measurements were taken from 707 of 718 children aged less than 5 years in the Montero region of Bolivia as part of a household survey. The results are discussed and presented as statistical data. Malnutrition was a common finding: 17% of the children had low weight-for-age (wasted) and 37% low height-for-age (stunted). As a screening measure, low height-for-age failed to identify 21% of the low weight-for-age children. The mid-upper arm circumference served as an effective screening measure for low weight-for-age children, although the choice of cutpoints is dependent on the desired sensitivity and specificity of the screening test. (Modified journal abstract)

9647 **Frerichs, R.R., Becht, J.M., Foxman, B.** *Childbearing and breast feeding in rural Bolivia — a household survey.* Journal of Tropical Pediatrics (London), 27(5), Oct 1981, 245-249. Engl. 10 refs.

Information was gathered by means of interviews during the last 3 months of 1977 from 605 households (98% participation) as part of a health survey in the Montero region of eastern Bolivia. Findings on fertility rates, delivery costs, delivery sites, breast-feeding rates, and weaning age are discussed and presented as statistical data. The results of this survey are intended to aid the Bolivian government to plan more effectively for the delivery of rural health services. (Modified journal abstract)

9648 **Gan, C.Y.** *Transmission of infection among household contacts of cholera patients in the 1978 outbreak in Perak.* Medical Journal of Malaysia (Singapore), 36(2), Jun 1981, 70-75. Engl. 8 refs.

In a 1978 study of 179 cholera cases in 8 health districts of Perak State in peninsular Malaysia, the excreta disposal systems and the occupations of the patients were analyzed to determine the transmission of infection among household contacts. Seven tables of data from the survey are presented and discussed. There were positive contacts in 56 (34.2%) of the 164 households of the cholera patients examined, with up to 6 infected individuals found per household. Out of these 95 infected household contacts, 8 developed clinical symptoms, giving a ratio of about 1:12 symptomatic to inapparent infections. In conclusion, it is suggested that the role of the asymptomatic carrier in the transmission of infection cannot be underestimated. (EB)

9649 **Gaudin, O.G., Nejmi, S., Avram, G.** *Immunité antipoliomyélitique acquise par les enfants d'Afrique du Nord après poliomyélite paralytique à type 1; déficience relative de l'immunité humorale comparée à celle des enfants européens. (Polio immunity in North African children hospitalized for paralytic poliomyelitis due to type 1; relative deficiency in humoral immunity compared with European children).* Revue d'Epidémiologie et de Santé Publique (Paris), 28(3), 1980, 291-298. Fren.

The present study examines the nature and scope of polio immunity in 81 Algerian children hospitalized for paralytic poliomyelitis in 1975 and in 27 Moroccan children hospitalized during 1973-1974. With the use of four tables, the authors discuss the distribution of poliovirus 1 antibodies and make a comparison with results observed in some European countries. Three points are emphasized: the antibody titres in North African children are lower than previously reported for European children during the period 1950-1960; there is a positive correlation between the antibody titres and the age of infection in both groups of children; and the non-polio enterovirus present in the intestine of paralyzed children at the same time as the poliovirus seems to suppress the polio immunity. (EB)

9650 **Giel, R., Arango, M.V. de, Climent, C.E., Harding, T.W., Ibrahim, H.H.** *Childhood mental disorders in primary health care: results of observations in four developing countries; a report from the WHO Collaborative Study on Strategies for Extending Mental Health Care.* Pediatrics (Springfield, Ill.), 68(5), Nov 1981, 677-683. Engl. 10 refs.

To ascertain the frequency of mental disorders in the Sudan, the Philippines, India, and Colombia, 925 children attending primary health care facilities were studied. Rates of 12%-29% were found in the four study areas. The range of mental disorders diagnosed was similar to that encountered in industrialized countries. The study showed that parents (usually the mother) readily recognize and report common psychological and behavioural symptoms when these are described in a simple set of questions. Despite this, the primary health workers themselves recognized only 10%-22% of the cases. The results have been used to design appropriate brief training courses in childhood mental disorders. Statistical data are included. (Modified journal abstract)

9651 **Gomes Pereira, M.** *Prioridades no setor saúde; análise com base em estatísticas de mortalidade de Brasília, Distrito Federal (Brasil), 1977-1978. (Health priorities: analysis based on mortality statistics of Brasília, Federal District (Brazil), 1977-1978).* Revista de Saúde Pública (São Paulo, Brazil), 14(4), Dec 1980, 509-514. Portuguese.

This paper presents and analyzes mortality statistics from Brasília, Brazil, for the years 1977 and 1978. The overall mortality was 5.1:1 000 population with approximately 50% of all deaths occurring in those aged less than 1 and more than 65 years. Perinatal and infectious diseases were the main cause of death among preschoolers, as were accidents among school children, adolescents, and young adults, and heart diseases and tumours in the middle-aged and elderly. Mortality for males was higher than for females in all age groups. Some foci for preventive programmes are presented. (HC-L)

9652 **González Alfonso, N., Apolinaire Pennini, J.J.** *Características epidemiológicas de la lepra; estudio de la prevalencia en la ciudad de Santa Clara. (Epidemiological characteristics of leprosy; study of its prevalence in Santa Clara city).* Revista Cubana de Higiene y Epidemiología (Havana), 18(1), Jan-Apr 1980, 55-68. Span. 13 refs.

This article describes the epidemiological characteristics, including the prevalence, of leprosy in Santa Clara City, Cuba, which has a ratio of 0.6 leprosy patients: 1 000 inhabitants. Among others, the authors have given particular attention to various heredofamilial factors and to establishing the source of infection in every case. Many geneological charts and copious statistical data are included. (Modified journal abstract)

9653 **González Delgado, J.B.** *Mortalidad infantil; experiencias y resultados en Remedios, año 1978. (Infant mortality; experiments and results in Remedios in 1978).* Revista Cubana de Pediatría (Havana), 52(4), Jul-Aug 1980, 325-330. Span. 8 refs.

In 1978, the province of Villa Clara, Cuba, had an infant mortality of 16.6:1 000 live births, with acute respiratory and gastrointestinal diseases ranking 4th and 5th, respectively, as cause of death. During the same year, the municipality of Remedios, Villa Clara, managed to eliminate entirely deaths from these two ailments and to reduce the overall infant mortality to 9.8:1 000 live births. This achievement is attributed to a policy of immediate hospitalization of all infants, but especially those aged less than 1 month, presenting at clinics with either acute respiratory or gastrointestinal disease. (HC-L)

9654 **Graitcer, P.L., Gentry, E.M., Nichaman, M.Z., Lane, J.M.** *Anthropometric indicators of nutrition status and morbidity.* Journal of Tropical Pediatrics (London), 27(6), Dec 1981, 292-298. Engl. 9 refs.

As part of a survey intended to link nutrition status with morbidity, weight and height measurements were obtained on 5 353 Haitian children aged 3-59 months who were representative of the national under-fives population. The results are discussed and presented as statistical data. The findings show an association between weight-for-height and the presence of recent symptoms of illness, fever, and diarrhea; this association did not hold when the prevalence of symptoms was compared to low height-for-age. (Modified journal abstract)

9655 **Greiner, T., Latham, M.C.** *Factors associated with nutritional status among young children in St. Vincent.* Ecology of Food and Nutrition (London), 10(3), 1981, 135-141. Engl. 51 refs.

The association of a number of economic, social, and demographic variables with child nutrition status was studied with respect to the preschool population of two towns in St. Vincent, the Caribbean (total sample, 189 children). Two-thirds of the children were found to suffer from some degree of malnutrition: 28.5% mild, 35% moderate, and 3% severe. Standard of living had the greatest impact on nutritional status, followed by duration of breast-feeding, clinic attendance, and (with a negative association) number of siblings. These findings are discussed and compared with those of similar surveys conducted in the same region. (HC-L)

9656 **Griffiths, M.** *Primary health care issues: growth monitoring.* Washington, D.C., American Public Health Association, International Health Programs, Oct 1981. 70p. Engl.
Also published in English in *Bulletin of the Pan American Health Organization, 14(1), 1980.*

This monograph examines the state of the art of growth monitoring as it is undertaken on a regular basis at the community or clinic level in primary health care and nutrition programmes throughout the developing world. It presents essential findings from research and field experiences that will enable the programme planner to understand the activities comprising a growth monitoring project, the major issues and problems involved in growth monitoring exercises, and some of the lessons learned in various projects and settings. Separate chapters cover recording systems, measuring tools, programme organization, and training. Included are a bibliography and appendices describing various tools and protocols. (DP-E)

9657 **Guan, Z.S., Mao, W.S.** *Survey and treatment of the blind in Xinhui county.* Chinese Medical Journal (Beijing), 95(6), Jun 1982, 401-403. Engl.

In a 4-month period in the winter of 1981, the authors succeeded in wiping out curable blindness in a tropical county of the People's Republic of China. The most common causes of blindness, which had an overall prevalence of 6.1% in the population of 775 947, were cataract, corneal opacity, glaucoma, and trachoma. In all, 598 operations were performed (all successfully) and other patients were cured by therapy. Statistical data are included. (Modified journal abstract)

9658 **Guyer, B., Bisong, A.A., Brigaud, M., Aymard, M.** *Seroepidemiology of poliovirus in Yaoundé, Cameroon, 1977: a survey following one year of immunization.* Journal of Tropical Pediatrics (London), 27(3), Jun 1981, 140-143. Engl. 10 refs.

Trivalent oral polio vaccine (TOPV) was given to children in Yaoundé (Cameroon) during 14 months before this serological survey in 1977; 20% of children aged less than 1 year and 30% aged less than 3 years received at least one dose of TOPV. Afterwards, neutralizing antibody to all three viruses was found in 16% of children aged less than 1 year and in 24% of those aged 1-2 years. The comparable figures in 1971 were 0% and 3%. The author suggests that the difference may have been caused by the spread of vaccine virus from immunized to unimmunized children. Statistical data are included. (Modified journal abstract)

9659 **Haller, L., Lauber, E.** *Santé de l'enfant d'âge scolaire en Côte d'Ivoire. (Health of schoolchildren in the Ivory Coast).* Acta Tropica (Basel,

Switzerland), 37(4), Dec 1980, Suppl II, 1-132. Fren.

With an aim to determining the health status of 430 schoolchildren living in four villages of the forest region of the Ivory Coast, this in-depth study determined basic anthropometric and haematological data and vitamin status and examined nutritional status in relation to parasitic infection and diet. Numerous graphs and tables of data from the study are presented and discussed. It was revealed that caloric intake was only 75%, protein consumption 80%, and lipid intake 30% of the levels of intake recommended by FAO. Among the disorders for which the investigations are described are the following: intestinal helminthiasis, schistosomiasis, tuberculosis, malaria, hepatitis, toxoplasmosis, onchocerciasis, and trichocephalosis. (EB)

9660 Hanotier, J., Gigase, P.L. *Note on a new focus of schistosomiasis (*S. mansoni*) in Rwanda.* Annales de la Société Belge de Médecine Tropicale (Brussels), 61(1), 1981, 93-98. Engl. 9 refs.

In examining the recent discovery of a new focus of schistosomiasis (*S. mansoni*) in northern Rwanda, the authors describe geographic and climatic aspects of the volcanic region around Lake Bulera (altitude 1 862 m) and Lake Ruhondo (altitude 1 764 m) near the Ugandan border. In a 1980 survey by the Department of Epidemiology of the Ministry of Health, a prevalence rate of 4.3% was found when single fecal smear examinations were carried out on 12 480 inhabitants of the two lake districts. Occurences of transmission at high altitudes (above 1 700 m) in Uganda, Zaire, and Ethiopia are discussed with reference to previous studies. Further epidemiological investigations are recommended. (EB)

9661 Harfouche, J.K. *Present state of infant and child feeding in the eastern Mediterranean region.* Journal of Tropical Paediatrics (London), 27(6), Dec 1981, 299-303. Engl. 20 refs.

The information presented in this report was extracted mostly from unpublished thesis material and WHO reports and working papers, since there have been very few studies on infant feeding practices in the 23 countries of the Eastern Mediterranean Region (Western Asia and Northern Africa). In this predominantly Muslim region, the crude birth rate is between 19-50:1 000 population and infant mortality 20-200:1 000 live births. Half of under-fives are inadequately nourished, while the main causes of infant and child deaths are gastroenteritis, respiratory infections, and infectious diseases. Breast-feeding and bottle-feeding patterns are described and the decline in the incidence and duration of breast-feeding associated with the proliferation of artificial baby foods and feeding bottles is discussed. The author suggests that the following aspects should be the subjects of further investigations: (1) infant lead intoxication due to use of 'kohl' (eye cosmetic) by mothers, (2) consumption of *qat* by mothers, (3) use of dried poppy seeds as an infant sedative, and (4) cultural beliefs and taboos. (EB)

9662 Hennart, P., Vis, H.L. *Breast-feeding and post partum amenorrhoea in Central Africa; I: milk production in rural areas.* Journal of Tropical Pediatrics (London), 26(5), Oct 1980, 177-183. Engl. 26 refs.

See also entry 9629.

In a study of milk production among the Shi and Havu mothers in the eastern highlands of Zaire (subsistence communities in a relatively healthy environment), 337 infants aged about 12 months were weighed before and after feeding over a 24-hour period to determine the amount of milk ingested. The amount of milk produced by the mothers per day varied from 611 g during the harvest season to 489 g during a period when food was in short supply. The infants received an average of 13 feedings per day and only 19% of the women had resumed menstruating one year after the birth of the baby. This paper presents the study methodology and findings, comparing them to data from other studies of milk production in Africa and other developing areas of the world. (HC-L)

9663 Henry, M.C., Kageruka, P., Ruppol, J.F., Bruneel, H., Claes, Y. *Evaluation du diagnostic sur le terrain de la trypanosomiase à* Trypanosoma brucei gambiense. *(Evaluation of trypanosomiasis (*T. brucei gambiense*) diagnosis in the field).* Annales de la Société Belge de Médecine Tropicale (Brussels), 61(1), 1981, 79-92. Fren. Refs.

The authors evaluate the technique of trypanosomiasis diagnosis used in parasitological and serological examinations carried out in 1978 on 2 403 inhabitants of Kwamouth, Zaire. A total of 121 persons were found to be carriers of trypanosomes in blood or in lymph nodes. A description of the survey methodology is presented and the results are discussed with the use of two charts and six tables of data. It was apparent that the thick blood film is the best current parasitological technique in field use. The combination 'punction fluid of lymph nodes and direct blood examinations', while easier to use in the field, did not provide significantly different results, while the indirect fluorescent antibody test was found to be even more efficient. (EB)

9664 Heywood, P., Hiles, S., Coghill, B., Clarke, L.J. *Growth patterns of highland children and some possible implications for assessment of nutritional status.* Papua New Guinea Medical Journal (Port Moresby), 24(1), Mar 1981, 45-49. Engl.

Cross-sectional height and weight data from children aged less than 5 years at three locations in the highlands of Papua New Guinea are analyzed. The proportion of children under 90% height-for-age increases rapidly with age. The proportion of children under 80% weight-for-height is much lower for all ages and peaks in the 2nd year of life. Thus, the increase with age in the proportion of children below 80% weight-for-age is primarily due to a progressive increase in the height deficit. The implications of this growth pattern for monitoring nutritional status will not be clear until the relative health significance of a deficit in height as compared to

a deficit in weight-for-height has been determined. Statistical data are included. (Modified journal abstract)

9665 **Horner, M.R., Stinton, N.L., Pringle, D.J.** *Contributions of international food aid to diets of Nicaraguan children.* Ecology of Food and Nutrition (London), 10(4), 1981, 203-211. Engl. 12 refs.

Partly an assessment of a supplemental feeding programme sponsored by the UN World Food Program, this paper presents the results of the dietary component of a 1977 nutritional status survey of 463 Miskito Indian preschool children in northeastern Nicaragua. Record of 24-hour food intake for periods of 3 consecutive days provided data for an evaluation of short-term variability. Low dietary diversity was indicated by the average consumption of only six different foods per day, breast-fed and non-breast-fed children having almost identical diets. Contributed foods provided as much as 12% of total food intake of non-breast-fed children. For 1 month, mean intakes of riboflavin and calcium were only 26% and 33%, respectively, of the WHO standard. Four tables and two figures are used in the discussion of dietary adequacy. (EB)

9666 **Hoyle, B., Yunus, M., Chen, L.C.** *Breast-feeding and food intake among children with acute diarrheal disease.* American Journal of Clinical Nutrition (Bethesda, Md.), 33(11), 1980, 2365-2371. Engl. 15 refs.

The quantities of food and breast milk ingested by 41 children aged 6-35 months, with and without diarrhea, were compared in a hospital study in Bangladesh; 15 children received routine diarrhea treatment with oral rehydration, another 15 received the same treatment and active encouragement was given to their mothers to feed the children a special diet, while 11 control children did not have diarrhea but their milk and food intakes were measured. Both groups with diarrhea ingested less than half the energy intake of the healthy controls, although the nutrient intake of the weaned children fell much more rapidly than that of the others. This reinforces the idea that breast-feeding is essential to the management of diarrhea, particularly in the undernourished. Statistical data are included. (Modified journal abstract)

9667 **Hughes, J.M., Boyce, J.M., Levine, R.J., Khan, M., Aziz, K.M.** *Epidemiology of eltor cholera in rural Bangladesh: importance of surface water in transmission.* Bulletin of the World Health Organization (Geneva), 60(3), 1982, 395-404. Engl. 20 refs.

In order to define the role of water used for drinking, cooking, bathing, and washing in the transmission of *Vibrio cholerae* biotype infections in an area with endemic cholera, surveillance was initiated in rural Bangladeshi neighbourhoods with a culture-confirmed cholera index case and others with index cases with non-cholera diarrhea as controls. In neighbourhoods with cholera infection, 44% of surface water sources were positive for *V. cholerae*, whereas only 2% of surface sources were positive in control neighbourhoods. The results, discussed and presented as statistical data, suggest that surface water is important in transmission of *V. cholerae*; education would be helpful for control. (Modified journal abstract)

9668 **Hussain, T., Khan, J., Khan, M.A., Iqbal, P.** *Nutrition survey of the people of the low income group in the rural and urban population of N.W.F.P.* Pakistan Journal of Science (Lahore), 32(1/2), 1980, 127-134. Engl. 12 refs.

A nutrition survey of 1 200 rural and 400 urban Pakistani families examined income and expenditure, number of children, family education, child mortality, feeding and weaning practices, and protein and calorie consumption by adults, children, and pregnant and lactating women. The results are discussed and presented as statistical data. In general, they revealed that the average family spent 94% of its income on food; that child mortality was 36%; that 94% of mothers stop breast-feeding when the child is aged 1-2 years and introduce solid foods at the age of 1 year; and that rural children received 15.5% less protein and 4.5% fewer calories, while urban children received 42.8% less protein and 14.8% fewer calories, than recommended intake. (DP-E)

9669 **International Children's Centre, Paris.** *Breast-feeding: biological value; a document for academic level workers and professionals.* Paris, International Children's Centre, Dec 1979. 6p. Engl.

The unique quality of mother's milk is discussed from a biological point of view in terms of proteins and non-protein nitrogen; fatty acids and glyceride structure; oligosaccharides and growth factors of *Bifidobacterium bifidum* immunoglobulins; bactoferrin, folic acid, and vitamin B12 ligands; and lysozyme, cellular components, and other defense factors against infection. The protective role of breast-feeding and the effect of conservation processes on breast milk are also briefly examined. (DP-E)

9670 **International Children's Centre, Paris.** *Breast-feeding.* Paris, International Children's Centre, Nov 1979. 9p. Engl.

This pamphlet lists some of the reasons why breast-feeding is rapidly declining and calls for action by governments, employers, hospitals, health centres, family planning personnel, and schools to combat this trend. Breast milk and bottle milk are compared in terms of content, cost, and effect on the child, the mother, and the community. Some statistical data are included. (DP-E)

9671 **Izuora, G.I.** *Acute paralytic poliomyelitis among Nigerian children in Enugu.* East African Medical Journal (Nairobi), 58(6), Jun 1981, 405-411. Engl. 10 refs.

From 1976-1979, 111 cases of acute poliomyelitis were seen among Nigerian children at the University of Nigeria Teaching Hospital, Enugu. Although no seasonal variation was observed, peak incidence occurred in children aged 12-24 months, with few cases among those aged more than 4 years. Immunization is efficacious and

should be given before the age of 6 months. Since injections seem to play a role in precipitating this illness, oral medications are recommended unless contraindicated. Statistical data are included. (Modified journal abstract)

9672 **Jancloes, M., Houyoux, J.** *Analyse des aspects épidémiologiques de la consommation alimentaire à Kinshasa (Zaire); étude longitudinale de 1 177 parcelles. (Epidemiological analysis of food consumption in Kinshasa, Zaire; longitudinal study of 1 177 households).* Dakar Médicale (Dakar), 26(1), 1981, 77-88. Fren. 16 refs.

A dietary survey involving 1 177 households was undertaken in Kinshasa, Zaire, and the findings correlated with data on family income, occupation of head of household, and type of neighbourhood. The manioc-based diet consumed by all levels of the survey population was found to be adequate in proteins but deficient in calories. Although the highest socioeconomic group spent three times as much on food as the lowest, the number of calories supplied by proteins merely doubled. This paper presents and analyzes the survey results, concluding that the manioc-based diet satisfies hunger but not energy requirements and that diversification of the basic diet is to be encouraged, e.g., by the addition of cereals and legumes. (HC-L)

9673 **Jaroonvesama, N., Charoentarp, K., Areekul, S., Aswapokee, N., Leelarasmee, A.** *Prevalence of* Fasciolopsis buski *and other parasitic infections in residents of three villages in Sena district, Ayudhaya province, Thailand.* Journal of the Medical Association of Thailand (Bangkok), 63(9), Sep 1980, 493-499. Engl. 10 refs.

Stool samples from 425 schoolchildren and adults from three villages in Sena district, Thailand, were examined for *Fasciolopsis buski* and other parasites and haematological studies were carried out on 272 of them. The overall prevalence of parasitic infection was 26% and the prevalence of *F. buski* was 20%, but infestation rates varied from 45% (33% for *F. buski*) in the village with the lowest socioeconomic status and level of hygiene by 7% (3% for *F. buski*) in the village with the highest, even though all three villages obtained their food supply (aquatic plants) from the same contaminated ponds. Individuals infested with *F. buski* were found to have lower serum vitamin B12 values than the group with no or other parasitic infections. Statistical data are included. (HC-L)

9674 **Jato, M.N., Jato, J.G.** *Measles vaccination coverage in rural areas: a study of seven villages in Cameroon.* International Nursing Review (Geneva), 28(6), Nov 1981, 183-185. Engl.

By means of interviews with parents, information was collected on the measles vaccination coverage of all children aged 9-24 months in seven rural villages in Cameroon. The results are discussed and presented as statistical data. Of 889 children surveyed, 645 (66.6%) had been vaccinated. Reasons why children had not been vaccinated included a lack of information (54), the distance from the vaccination centre (38), the unwillingness of the mother (29), the fact that the child had already had measles (23), and the sickness of mother or child (19); 81 families gave no reason. (DP-E)

9675 **Johnston, J.H., Luby, J.** *Tuberculosis in Gurkhas; is there a greater incidence in those from East Nepal?* Journal of the Royal Army Corps (London), 127(3), Oct 1981, 134-138. Engl.

Chest X-rays of 1 057 potential Gurkha recruits from east Nepal and 964 from west Nepal were examined. Seventy-four X-rays from eastern Nepalis showed changes suggestive of past or present tuberculosis (including 18 with calcified primary complexes) but only 34 (5 with calcified primary complexes) from western Nepalis, suggesting that there is a higher tuberculosis infection rate in men from east Nepal. There was nevertheless no difference in the Heaf test gradings nor in the incidence of clinical tuberculosis between a regiment of Gurkha soldiers from east Nepal and one from west Nepal. Statistical data are included. (Modified journal abstract)

9676 **Joshi, C.K., Bhardawaj, A.K., Vyas, B.L.** *Intestinal parasites in slum dwellers.* Journal of the Indian Medical Association (Calcutta, India), 75(8), Oct 1980, 156-159. Engl. 13 refs.

Stool samples from 705 apparently healthy slum dwellers in Bikaner, Rajasthan, India, were examined for intestinal parasites and the prevalence by age, sex, income, access to a latrine, and level of personal hygiene was calculated. Males of all ages were more affected than females and the last three variables correlated negatively with infestation rates. For example, the overall prevalence was 29.76%, but among those without a latrine and those judged as having the poorest standard of personal hygiene it was 40.89% and 43.09%, respectively. *Ascaris lumbricoides* and *Entamoeba histolytica* were the most frequently encountered parasites. (HC-L)

9677 **Kaine, W.N., Udeozo, I.O.** *Incidence of sickle-cell trait and anaemia in Ibo pre-school children.* Nigerian Journal of Paediatrics (Ibadan), 8(4), 1981, 87-89. Engl.

Of 1 022 Ibo children in eastern Nigeria aged 4 months-5 years who were screened by electrophoresis for the presence of abnormal haemoglobins, 125 of 559 boys and 105 of 463 girls had the sickle cell trait. Eight cases of sickle cell anaemia were found in each sex. The overall incidence of Hb S (24.1%) was similar to reports from other parts of Nigeria. The rarity of Hb C in Ibos is confirmed by this study. Statistical data are included. (Modified journal abstract)

9678 **Kambire, P., Martin-Samos, F., de Lauture, H.** *Environnement et approche sanitaire de la Haute-Volta. (Environmental and health approach in Upper Volta).* Etudes Médicales (Paris), (1), 1978, 45-63. Fren.

A description of the climatic, geographic, and demographic features of Upper Volta, a tropical African

country of 5.5 million inhabitants surrounded by the Sahel, is followed by a look at its economic and health situations. Malaria continues to be a major cause of infant mortality, with the number of new cases reported annually ranging between 530 000-580 000. There is a high frequency of onchocerciasis (550 000 cases) and trachoma (700 000 cases). Seven tables are used in the discussion of the prevalence of other common disease, e.g. leprosy, bilharzia, trypanosomiasis, and digestive and respiratory diseases. The idea is expressed that only integrated action in the areas of environmental sanitation, agriculture, and sociocultural development will bring about improvements in the health of the population. (EB)

9679 **Kardjito, T., Grange, J.M.** *Immunological and clinical features of smear-positive pulmonary tuberculosis in East Java.* Tubercle (Edinburgh), 61(4), Dec 1980, 231-238. Engl. 25 refs.

The immunological and clinical features of 90 Javanese patients with smear-positive pulmonary tuberculosis were investigated and compared with 50 age-matched healthy controls. Five distinct responses were elicited by tuberculin testing; these responses are discussed and presented as statistical data. The need to establish more rigorous criteria for assessing the immune responses in tuberculosis and for studying the interactions between the protective and non-protective reactions is stressed. (Modified journal abstract)

9680 **Karrar, Z.A., Omer, M.I.** *Morbidity patterns among under-five children in a rural community in Sudan.* Tropical and Geographical Medicine (Haarlem, Netherlands), 33(1), Mar 1981, 75-77. Engl.

This paper presents preliminary findings about morbidity observed in a prospective epidemiological study in a village near Khartoum (Sudan) during 1977-1979. A total of 293 children aged less than 5 years in 310 households were followed-up for 2 years; each was visited twice monthly. Information on cough, fever, diarrhea, vomiting, skin diseases, conjunctivitis, measles, and whooping cough was collected and is presented as statistical data. The seasonality of various diseases, their severity, and age distribution are discussed and compared over the 2-year period. (Modified journal abstract)

9681 **Kazi, H.A.** *Analysis of fifteen hundred psychiatric cases: an out-patient study of two years (1975 and 1976) at Hyderabad, Sind.* Pakistan Journal of Medical Research (Karachi, Pakistan), 20(3), Jul-Sep 1981, 71-75. Engl. 9 refs.

With an aim to determining the extent and variety of psychiatric problems in Pakistan's province of Sind (1977 population about 14 million), a study of all 1 500 outpatients attending the mental hospital in Hyderabad during January 1975-December 1976 was carried out. Common ailments included schizophrenia (44%); drug addiction (14%); affective disorders, mainly depression (13%); epilepsy (7%); and mental retardation (3%). Educational background and occupational status were taken into account. Of the 520 female and 980 male patients, 57% were aged between 20-39 years and 4% were aged less than 10 years. The author suggests that the limited psychiatric services available at district hospital levels and patients' primary consultation with traditional healers may account for the differences in results of this study and those of similar studies in other developing countries. (EB)

9682 **Keita, M.F., Prost, A., Balique, H., Ranque, P.** *Associations of filarial infections in the savannah zones of Mali and Upper-Volta.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(3), May 1981, 590-592. Engl.

In 13 villages scattered throughout Mali, examinations were made of 1 102 people, of whom 684 (62%) showed microfilaria; 35% of these were *Onchocerca volvulus*, 14.3% *Wuchereria bancrofti*, and 44% *Dipetalonema perstans*. Infections of *W. bancrofti* and *D. perstans* were significantly correlated but not those of *O. volvulus* and *W. bancrofti* unless *D. perstans* was absent. Somewhat similar findings were made with 205 people in the Upper Volta near the Ghanaian border. Statistical data are included. (Modified journal abstract)

9683 **Keittivuti, B., D'Agnes, T., Keittivuti, A., Viravaidya, M.** *Prevalence of schistosomiasis and other parasitic diseases among Cambodian refugees residing in Bang-Kaeng Holding Center, Prachinburi province, Thailand.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(5), Sep 1982, 988-990. Engl.

After isolated cases of schistosomiasis were discovered (as a result of stool examinations) among Cambodian refugees residing in Thailand, further epidemiologic investigations were conducted in March 1981 on a sample of 5 085 Cambodian refugees in the Ban-kaeng holding centre, using the intradermal skin test as a screening device to determine the prevalence of this disease. A positive diagnosis of *Schistosoma mekongi* was confirmed in 17 of those examined by recovery of eggs in the stool. All positive cases came from geographic areas in Cambodia where schistosomiasis has not been previously reported, indicating that schistosomiasis in Cambodia is currently more widespread than generally believed. Statistical data are included. (Modified journal abstract)

9684 **Kerr, A.A.** *Lower respiratory tract illness in Polynesian infants.* New Zealand Medical Journal (Wellington), 93(684), May 1981, 333-335. Engl.

A follow-up at 5 months of 269 Polynesian infants born at Hutt Hospital (New Zealand) over a 9-month period showed a 42% incidence of lower respiratory symptoms; 19% of the infants had recurrent or prolonged symptoms. These infants frequently had a family history of asthma or bronchitis in 1st degree relatives, had a greater incidence of damp housing, and were often of lower socioeconomic status. There was also a lower rate of breast-feeding in the symptomatic groups, suggesting that breast milk has a role in preventing the syndrome

of recurrent respiratory illness in Polynesian infants. Some statistical data are included. (Modified journal abstract)

9685 **Khan, M.U., Mosley, W.H., Chakraborty, J., Sarder, A.M., Khan, M.R.** *Relationship of cholera to water source and use in rural Bangladesh.* International Journal of Epidemiology (Oxford, UK), 10(1), 1981, 23-25. Engl.

Cholera prevalence in a sample of families in a rural area of Bangladesh is reported in relation to water supply and use. Tanks were the primary source for 65% of families, canals for 20%, and the river for 14%. The highest attack rate was associated with access to canal water (13%). Attack rates did not vary markedly according to the purpose for which a source was used. The importance of cultural patterns in water use is identified. Statistical data are included. (Modified journal abstract)

9686 **Khin, M.N., Tin, T.O., Kywe, T., Nwe, N.H.** *Study on the lactation performance of Burmese mothers.* American Journal of Clinical Nutrition (Bethesda, Md.), 33(12), Dec 1980, 2665-2668. Engl.

Quantity and proximate composition of breast milk from 90 Burmese mothers of a low-income group was studied at three stages of lactation. Protein content of breast milk at 1-4 months of lactation was significantly higher than that of 7-12 months but there were no significant differences in milk fat, lactose, and energy among the three stages, nor was there a difference in proximate composition of breast milk between well-nourished and malnourished groups. Potential milk output of mothers belonging to the well-nourished group was significantly higher than the corresponding values for milk intake of infants. Statistical data are included. (Modified journal abstract)

9687 **Khoshzaban, A., Saboori, N., Nategh, R.** *Isolation of enteroviruses from different water sources in Tehran.* Iranian Journal of Public Health (Teheran), 7(1), Spring 1978, 54-55. Engl.

In this study, 8 samples from four main Tehran (Iran) sewages, 10 from rivers that supply Tehran drinking water, and 22 samples from surface waters of different localities in Tehran were tested directly and by the phase separation (PS) concentration method for the detection of enteroviruses. Results indicated that three samples of sewage and one of surface water were positive by direct method. One sample from sewage, three from surface waters, and two of river water were positive by PS concentration method, which proved to be an effective method for the detection of viruses from river and surface water. The types of viruses found are briefly discussed. (Modified journal abstract)

9688 **Kloos, H., DeSole, G., Lemma, A.** *Intestinal parasitism in seminomadic pastoralists and subsistence farmers in and around irrigation schemes in the Awash Valley, Ethiopia, with special emphasis on ecological and cultural associations.* Social Science and Medicine (Aberdeen, UK), 15B(4), Oct 1981, 457-471. Engl. 66 refs.

The prevalence of intestinal parasitism in seminomadic pastoralists affected by river basin and irrigation developments is studied in relation to cultural and ecologial factors, with examples from five ethnic groups representing six cultural-ecological situations in the Awash Valley of Ethiopia. Sanitation levels and other parasite transmission parameters in each of the six study populations are assessed by using a simplified semiquantitative system of scoring for variables. The results, which are discussed and presented as statistical data, are examined to analyze the occurence of infection in pastoralists largely continuing their traditional way of life and in tribesmen who settled in and around irrigation schemes and became farmers or farm labourers, and to evaluate some disease control measures. (Modified journal abstract)

9689 **Knight, R., Merrett, T.G.** *Hookworm infection in rural Gambia; seasonal changes, morbidity and total IgE levels.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(3), 1981, 299-314. Engl. 38 refs.

Four surveys of hookworm infection were conducted over a 14-month period in two Gambian villages with study populations of 168 and 174, respectively. The surveys involved fecal egg counts, haemoglobin estimation, immunoglobin E determination, anthropometry, and physical examination. A rise in egg count beginning 2 months after the short rainy season and peaking after 7 months was noted; counts in adults returned to previous values after 12 months but children aged less than 10 years showed net increments. Only four persons out of 342 could be categorized as suffering from hookworm anaemia and it is concluded that the general pattern of infection is one of high prevalence and low morbidity. This paper analyzes and discusses the study findings, which are presented in six tables. (HC-L)

9690 **Knodel, J., Debavalya, N.** *Breastfeeding in Thailand: trends and differentials, 1969-79.* Studies in Family Planning (New York), 11(12), Dec 1980, 355-377. Engl. 25 refs.

Data from a series of national sample surveys conducted in Thailand from 1969-1979 were analyzed to document trends and differentials in breast-feeding practices among the Thai population. The study findings indicate a moderate but steady decline in the practice of breast-feeding over the last decade among both rural and urban women; rural women, nonetheless, still breast-feed on the average for well over a year. Reduced breast-feeding was associated with higher socioeconomic status and education, hospital delivery, and contraceptive use, but the relationship between breast-feeding and maternal work differed for urban and rural women. This paper presents in detail the study methods and findings (including 19 tables of data) and discusses their implications for public health. (HC-L)

9691 **Kolstrup, N., McMahon, J.E., Magayuka, S.A., Mosha, F.W., Bushrod, F.M.** *Control measures against Bancroftian filariasis in costal villages in Tanzania.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(4), 1981, 433-451. Engl. 18 refs.
See also entry 9708.
This paper evaluates the effect of anthelminthic and insecticidal control measures undertaken in four coastal villages in Tanzania where the intensity of transmission and the level of endemicity of bancroftian filariasis (*Wuchereria bancrofti*) were studied. Control measures consisted of mass chemotherapy with diethylcarbamazine and spraying with larvicides. Parasitological and clinical examination methods and vector control procedures are described and the findings are discussed with the use of 11 tables. A wide variation in transmission patterns within the same geographical area was revealed. The relevance of the present state of knowledge to the application of wider scale filariasis control measures in Tanzania is summarized. (EB)

9692 **Koura, M., Upatham, E.S., Awad, A.H., Ahmed, M.D.** *Prevalence of* Schistosoma haematobium *in the Koryole and Merca districts of the Somali Democratic Republic.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(1), 1981, 53-61. Engl. Refs.
As part of a 1976 WHO-assisted schistosomiasis control project, a total of 31 031 Somalian villagers and farmers of both sexes and all ages were examined by means of urinary egg counts for *Schistosoma haematobium*. The findings are discussed and presented as statistical data. Prevalence rates ranged from 48.9%-65.8% in different areas and were higher in males; subjects from northern Somalia, wich has no rivers, were free from infection. (DP-E)

9693 **Kuberski, T., Holdaway, D., Turner, K.J., Nemaia, H.** *Wheezing bronchitis in children on a South Pacific island.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(1), Jan 1981, 264-272. Engl. 12 refs.
Retrospective and prospective studies were done on children with wheezing bronchitis on the Pacific Island of Niue, where it was found to be a common cause of morbidity but not mortality. Episodes of the disease were most common in children aged less than 4 years and tended to disappear as they became older. A case-control study indicated that smoking by the mother, positive stool examination for parasites, mother with a history of wheezing bronchitis, and father smoking were all correlated with wheezing bronchitis, in addition to sensitivity to housedust mite and plantain. Statistical data are included. (Modified journal abstract)

9694 **Kurup, J.H., Verghese, A.** *Psychiatric disturbances among leprosy patients; an epidemiological survey.* International Journal of Leprosy (Washington, D.C.), 48(4), Oct 1980, 431-434. Engl.
An epidemiological study was done to determine the prevalence of psychiatric disturbances among 494 randomly selected leprosy patients in south India, of whom 49 were found to have a psychiatric disturbance, giving a prevalence rate of about 99:1 000. Depressive reaction was the most common disturbance seen. Those patients who were sick for a longer time and those who developed physical deformities were found to be more prone to psychiatric disturbances. It is emphasized that supportive psychotherapy is important in the management and rehabilitation of leprosy patients. Statistical data are included. (Modified journal abstract)

9695 **Larrabee, W.F., Talavera, R.** *Tuberculin dual testing in Panama.* Tubercle (Edinburgh), 61(4), Dec 1980, 239-243. Engl.
A total of 137 adult Panamanians were skin-tested with two standard tuberculins (PPD-S and PPD-T) and three antigens prepared from atypical mycobacteria: PPD-B (Battey), PPD-Y (*Mycobacterium kansasii*) and PPD-X (*M. xenopi*). PPD-T elicited fewer doubtful reactions than PPD-S. Both PPD-B and PPD-X, when used as antigens in dual testing, greatly reduced the number of doubtful reactions. Statistical data are included. (Modified journal abstract)

9696 **Latif, A.S.** *Sexually transmitted diseases in clinic patients in Salisbury, Zimbabwe.* British Journal of Venereal Diseases (London), 57(3), 1981, 181-183. Engl.
From December 1979-February 1980, 2 867 patients attended a sexually transmitted diseases clinic in Salisbury, Zimbabwe. Of the 929 patients examined and interviewed, clinical and laboratory findings showed that chancroid was the most common disease (38.4%) and gonorrhea almost as common (35.3%) in men. Pelvic inflammatory disease was the commonest disease (47%) and gonorrhea the next commonest (22.7%) in women. The results are discussed and presented as statistical data. (Modified journal abstract)

9697 **Lauber, E., Reinhardt, M.C.** *Prolonged lactation performance in a rural community of the Ivory Coast.* Journal of Tropical Pediatrics (London), 27(2), Apr 1981, 74-77. Engl. 27 refs.
In the village of Kpouébo, Ivory Coast, the volume of milk ingested by 37 infants in their natural environment during 18 months of breast-feeding was assessed by weighing the infants before and after each feed consumed over a 12-hour period one day per month. The 12-hour volume decreased from an initial 500 ml at age 1 month to 385 ml at age 18 months. According to the Harvard standard, growth was satisfactory on breast milk alone up to age 5 months. No case of failure to breast-feed was observed. It is suggested that nutrition education stress the need for locally-produced weaning food from age 6 months onward, without, however, undercutting the importance of breast-feeding beyond 6 months. (HC-L)

9698 **Laverdant, C., Thabaut, A., Hardelin, J., Cristau, P., Molinie, C.** *Bilharzioses africaines de première invasion; éléments de diagnostic; évolu-*

tion à 5 ans. (African schistosomiasis at the invasion stage; criteria for diagnosis; control after 5 years). Médecine Tropicale (Marseilles, France), 40(3), May-Jun 1980, 251-258. Fren. 25 refs.

This article reports on a study of African schistosomiasis in 181 young soldiers on a 3-6 months transitory stay in Chad during 1973-1974 and the findings in 39 of these cases after a period of 5 years. Discussed are the following: the clinical parasitological examinations; the relative value of classical diagnostic criteria; the reliability of immunologic symptoms; and the frequency, importance, and precocity of specific granulomatous hepatic changes detected by laparoscopy and biopsy (87.2% of the cases). Observations on the value of nirdazole and the possibility of continuance of granulomatosis after clinical recovery are presented. (EB)

9699 **Lie, G.H.** *Nutritional aspects of fermented foods in Indonesia: an overview.* Jakarta, Ministry of Health, 1981. 26p. Engl. 25 refs.

Among the many benefits of the food fermentation process are the following: improvement in appearance and in flavour; reduction in cooking time and in the presence of undesirable factors and toxins; and increase in keeping quality, in digestibility, and in nutritive value of protein. This document presents, with the use of tables, the most important traditional fermented foods in Indonesia and the typical proximate composition of these foods. Classified into two main groups depending on their raw starting material, they include fermented vegetable products from legumes, rice, and cassava roots and fermented fish products. They are used either as an accompanying dish to the staple food (e.g. *tempeh* and *oncom*), as a condiment (e.g. *ikan peda*, *transi*, and *bekasang*), or as a seasoning (e.g. *kecap*). (EB)

9700 **Linhares, A.C., Pinheiro, F.P., Freitas, R.B., Gabbay, Y.B., Shirley, J.A.** *Outbreak of rotavirus diarrhea among a nonimmune, isolated South American Indian community.* American Journal of Epidemiology (Baltimore, Md.), 113(6), 1981, 703-710. Engl. 24 refs.

During July-August 1977, an outbreak of acute diarrhea occurred in an unusually isolated population, the Tiriyo Indians in the north of Para, Brazil. Diarrhea was reported by 157 (70%) of the 224 Indians living in the village during the epidemic. The results of rotavirus tests and seroconversions are discussed and presented as statistical data. (Modified journal abstract)

9701 **Loza Saldívar, A. de la, Saldaña, J.H.** *Principales caracterizaciones epidemiológicas de algunas enfermedades transmisibles en la población amparada por el IMSS. (Basic epidemiological aspects of some transmissible diseases in a population protected by the Mexican Institute of Social Security).* Salud Pública de México (Mexico City), 22(5), Sep 1980, 547-568. Span. 11 refs.

From 1974-1978, almost 40 million cases of communicable diseases were reported to the *Instituto Mexicano del Seguro Social*, a rate of 500:1 000 beneficiaries. With the aid of nine graphs and eight tables of data, this paper examines the epidemiology and importance of those diseases that are amenable to vaccination, with particular emphasis on measles and poliomyelitis. (HC-L)

9702 **Luwang, N.C., Singh, P.I.** *Protein energy malnutrition amongst the underfives of a hill tribal population of Manipur.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 18(4), Apr 1981, 139-143. Engl. 13 refs.

In this September 1978-April 1979 study of 300 children aged less than 5 years from the Tangkhul hill tribe in Manipur, India, the prevalence of protein-energy malnutrition was found to be 42.67% (28% mild, 10.67% moderate, and 4% severe). Malnutrition, which was most common during the 2nd year and infrequent until the age of 6 months, had therefore a significant association with age but no relation to sex or birth order. Infectious diseases appeared to be a contributing factor. Statistical data are included. (Modified journal abstract)

9703 **MacPhail, A.P., Bothwell, T.H., Torrance, J.D., Derman, D.P., Bezwoda, W.R.** *Iron nutrition in Indian women at different ages.* South African Medical Journal (Cape Town), 59(26), Jun 1981, 939-942. Engl. 24 refs.

The iron status of 320 Indian women living near Durban, South Africa, was assessed by measuring their rates of radio-iron absorption, transferrin saturation, serum ferritin concentration, and haemoglobin concentration. All measurements of iron status were better in the older age groups, presumably as a result of cessation of menstruation. The duration of menstruation (days per month) had a significant effect on iron status. A profile of iron status of the whole sample, based on the cumulative frequency distribution of iron stores, showed that the women were more iron deficient than US women. Statistical data are included. (Modified journal abstract)

9704 **Mandara, N.A., Takulia, S., Kanyawana, J., Mhalu, F.** *Asymptomatic gonorrhoea in women attending family planning clinics in Dar es Salaam, Tanzania; results of a pilot study.* Tropical and Geographical Medicine (Haarlem, Netherlands), 32(4), Dec 1980, 329-332. Engl. 9 refs.

In an attempt to determine the prevalence of asymptomatic gonorrhea in women in Tanzanian urban areas, 405 women attending family planning clinics in Dar es Salaam had cervical swabs cultured on a selective gonorrhea medium for *Neisseria gonorrhoeae*. Twenty-nine of them (7.1%) were found with the organism despite the absence of disease symptoms at the time of screening, of whom 20 (69%) were treated with a single dose of penicillin. Only 4 (13.8%) of their male contacts came forward for treatment. In view of this high prevalence, consideration should be given to screening for gonorrhea in antenatal and family planning clinics, as is now done for syphilis. The material cost of gonococcal screening per individual was estimated at US$1.25. (Modified journal abstract)

9705 **Mansour, N.S., Higashi, G.I., Schinski, V.D., Murrel, K.D.** *Longitudinal study of* Schistosomiasis haematobium *infection in Qena governate, Upper Egypt: I: Initial epidemiological findings.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(4), Jul 1981, 795-805. Engl. 33 refs.

This paper reports the initial epidemiological findings of a 1975 longitudinal study on the immunology of *Schistosoma haematobium* in a portion of the Qena governorate of Upper Egypt. Based on urine examination, the prevalence of infection was 29.9% in Khozam (1 454 subjects) and 26.9% in El Ayaisha (949 subjects). It was consistently higher in males (41.1%) than females (17.6%). Age-prevalence and age-intensity curves showed that, whereas prevalence rose to a steady plateau level by age 10 years, intensity peaked at that age and then declined sharply with a corresponding diminution of heavy egg excreters. In the analysis of survey results, reference is made to several similar studies on schistosomiasis in developing countries. (EB)

9706 **McDevitt, T.M.** *Infant mortality decline in rural and urban areas in the post-war period.* Papua New Guinea Medical Journal (Port Moresby), 22(4), Dec 1979, 16-28. Engl. 12 refs.

The author applies Feeney's method to 1966 and 1971 census data from Papua New Guinea in an attempt to measure the decline in infant mortality in rural and urban areas. The results are discussed and presented as statistical data. These declines indicate only marginal improvements in village health services. (DP-E)

9707 **McGlashan, N.D.** *Health problems in Australia and New Zealand.* Social Science and Medicine (Aberdeen, UK), 14D((2), Jun 1980, 81-269. Engl. Refs.

This special issue, containing 23 papers arranged in three groups, brings together social science and medical studies from Australia, New Zealand, and Papua New Guinea. The 1st part deals with the environment and human health and contains studies on climatic factors, malaria as an imported disease, endemicity of trachoma, subnutrition in children, applied nutritional geography, and participatory health care. Ten papers on spatial variations of ill-health make up section 2, in which the authors use mortality statistics to illustrate sociodemographic and geographical differences. Diabetes, alcohol-related illnesses, connective tissue diseases, suicide, cancer, and asthma are some of the conditions studied. The 3rd section includes six studies concerned with access to social facilities, in particular child day care, elderly care, health services planning and projected population change, hospital resource allocation, female employment and medical studies, and the role of a community health centre. (EB)

9708 **McMahon, J.E., Magayuka, S.A., Kolstrup, N., Mosha, F.W., Bushrod, F.M.** *Studies on the transmission and prevalence of Bancroftian filariasis in four coastal villages of Tanzania.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(4), 1981, 415-431. Engl. 36 refs.

See also entry 9691.

In surveys of Bancroftian filariasis carried out in the Tanga region of Tanzania from 1973-1975, parasitological and clinical examinations of the total population aged more than 1 year and longitudinal entomological studies of mosquito vectors were conducted. The insect collection and dissection techniques are described and the entomological and clinical findings, e.g., parous and infectivity rates, densities, prevalence, distribution, transmission patterns, etc., are discussed with the use of tables. Comparisons are made to previous studies of this kind. The estimated number of potential infective mosquito bites:person:year varied from 24-189 and was related to the degree of filarial endemicity. The vectors in order of importance were –*Anopheles gambiae s.l., Culex pipiens quinquefasciatus* and *An. funestus*. (EB)

9709 **Meakins, R.H., Harland, P.S., Carswell, F.** *Preliminary survey of malnutrition and helminthiasis among schoolchildren in one mountain and one lowland ujamaa village in northern Tanzania.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 75(5), 1981, 731-735. Engl. Refs.

In this April 1976 study, the nutritional status, parasite prevalence, and immediate skin hypersensitivity to *Ascaris* and *Schistosoma* antigens were determined for 185 schoolchildren living in two *ujamaa* villages in northern Tanzania. The results are discussed and presented as statistical data. In the lowland village, prevalence rates were as follows: *Schistosoma haematobium*, 53.8%; *Ascaris*, 26.0%; and hookworm, 24.7%, while 57.5% of the children examined were malnourished. In the mountain village, the parasite prevalence rates were: *S. haematobium*, 15.2%; *S. mansoni*, 1.6%; *Ascaris*, 65.2%; and hookworm, 24.1%; malnutrition was found in 81.9% of the boys and in 41.2% of the girls. Immediate skin hypersensitivity tests proved unreliable. (Modified journal abstract)

9710 **Mendoza, H.R., Levine, M.M., Kapikian, A.Z., Martinez, J.D., Dominguez, J.A.** *Factores etiológicos de la diarrea aguda del lactante en la República Dominicana. (Aetiological factors of acute infantile diarrhea in the Dominican Republic).* Archivos Dominicanos de Pediatría (Santo Domingo), 17(1), Jan-Apr 1981, 43-51. Span. 24 refs.

A study of the role and seasonality of enteropathogens and rotavirus in infant diarrhea was undertaken in an oral rehydration unit of the children's hospital in Santo Domingo, Dominican Republic, from February-August 1979. Examination of stool samples from 76 randomly selected children aged less than 2 years revealed evidence of *Escherichia coli* enteropathogens in 14.4% of all cases, rotavirus in 9.2%, and shigella in 2.6%. The incidence of *E. coli* peaked during the months of July and August, while rotavirus peaked in February and March. Since the pathological agent could not be identified in 73.8% of all cases, it is suggested that routine

treatment of cases of acute diarrhea with antibiotics is questionable practice. Statistical data are included. (HC-L)

9711 **Mohr, W.** *Paragonimiasis in West Africa; report on an interdisciplinary study.* In Gebhart, J.A., Cerny, K., eds., Symposia o Problematice Zdravotnictvi ve Vztahu k Rozvojovym Zemin, Prague, Univerzita Karlova, 1981, 174-176. Engl. For complete document see entry 9253.

From 1974-1975, a multidisciplinary research team including a helminthologist, veterinarian, radiologist, and clinician met in Enugu, Nigeria, in order to study the clinicial and X-ray manifestations of paragonimiasis and to find and clarify the type of pathogen and final animal host of the parasite. This paper briefly summarizes the team's findings. Two pathogens, *Paragonimus africanus* and *P. utero-bilateralis*, were responsible for two different clinical forms of the disease. The principal animal hosts were the Zibeth cat in Nigeria and the Kasimanse cat in Cameroon. (HC-L)

9712 **Mougrabi Mizrahi, M., Zárate Aquino, M.L., Alvarado Gutierrez, A., Reyes Cortés, A., Valdez Dávila, A.J.** *Estudio epidemiológico de campo de un brote de poliomielitis ocurrido en el estado de Coahuila durante 1977. (Epidemiological field study of an outbreak of poliomyelitis in Coahuila state in 1977).* Salud Pública de México (Mexico City), 22(1), Jan-Feb 1980, 39-44. Span.

Simporio sobre Consideraciones Epidemiológicas y Etiológicas de Tres Brotes Epidémicos de Poliomielitis en México, Mexico City, 25 Aug 1978.

An unusual outbreak of poliomyelitis occurred in Coahuila, Mexico, in 1977 involving a total of 95 cases. Thirty of these were studied in detail and data regarding their age, sex, symptoms, antibody titres, virus (where found), and vaccination status are presented. The discovery that 80% of the patients had received one or more doses of trivalent Sabin vaccine — and that 33% had received all three — prompted an investigation into the quality of the vaccine. A batch of low-potency vaccine was found that may have been responsible for the outbreak. The methodology used in this study is recommended for use in other epidemics. (HC-L)

9713 **Mutanda, L.N.** *Epidemiology of acute gastroenteritis in early childhood in Kenya; I: incidence in hospitals.* Journal of Tropical Pediatrics (London), 26(5), Oct 1980, 172-176. Engl. 20 refs.

A retrospective study of data on hospital admissions in Kenya was undertaken in order to shed light on the epidemiology of early childhood acute gastroenteritis and data on temperature, rainfall, and relative humidity were examined. The somewhat disparate findings are as follows: nearly 20% of admissions to three children's hospitals in Nairobi were due to diarrhea; the number of cases of diarrhea varied significantly from month to month in one of the hospitals but no significant correlation with meteorological variables could be established; and on the basis of data from the Kenyatta National Hospital, severe diarrhea was found to peak in infants aged 3-5 months, measles in those aged 6-8 months, and mild diarrhea in children aged 12-14 months. Four tables and two graphs of data are presented. (HC-L)

9714 **Mutanda, L.N.** *Epidemiology of acute gastroenteritis in early childhood in Kenya; V: an inverse relationship between the peak age-incidence and the waning of rotavirus maternal antibodies.* East African Medical Journal (Nairobi), 57(8), Aug 1980, 545-548. Engl. 8 refs.

See also entries 8326 (volume 12) and 9715.

Rotavirus antibodies were detected in 38 (73%) out of a total of 52 sera collected from cord blood of neonates at Pumwani Maternity Hospital, Nigeria, but antibodies were found in only 7 (11%) of 61 sera obtained from children aged 2-5 months. In the age-group 0-5 months there appeared to be an inverse relationship between the prevalence of gastroenteritis and the waning of rotavirus maternal antibodies. After this age there was a gradual rise in the percentage of rotavirus antibodies in children tested and by the age of 3 years about 90% of the children had acquired antibodies. Statistical data are included. (Modified journal abstract)

9715 **Mutanda, L.N.** *Epidemiology of acute gastroenteritis in early childhood in Kenya; III: distribution of the aetiological agents.* East African Medical Journal (Nairobi), 57(5), May 1980, 317-326. Engl. 20 refs.

See also entries 8326 (volume 12) and 9714.

This prospective study was undertaken to determine the distribution in time and space of rotavirus, shigella, salmonella, and enteropathogenic *Escherichia coli* in three urban hospitals and a rural village in Kenya. Three groups of children were studied: hospitalized, outpatient, and Masai village children; the 1st two groups had diarrhea, the 3rd was asymptomatic. Rotavirus was the predominant pathogen isolated from children in Nairobi and Kisumu hospitals, but shigella was found as frequently as rotavirus in Mombasa. The yield of rotavirus in Masai children was only about 2%. Statistical data are included. (DP-E)

9716 **Myint, T.T.** *Tuberculous meningitis and BCG vaccination in Burmese children.* Journal of Tropical Pediatrics (London), 26(6), Dec 1980, 227-231. Engl. Refs.

In this January 1975-June 1976 study, 150 cases of tuberculosis meningitis admitted to Children's Hospital in Rangoon (Burma) are analyzed; the presenting symptoms, clinical manifestations, investigative findings, and the factors influencing the outcome are discussed and presented as statistical data. At the time of discharge, 61 children (40.7%) had no motor neurological deficit, 59 (39.3%) were left with motor neurological deficit, and 30 (20%) died. The factors increasing mortality and sequelae rates are considered. Thirty-nine children had received BCG vaccination in their newborn period and the possible causes for ineffective protection against tuberculosis meningitis are examined. (Modified journal abstract)

9717 **Narro, J.R., Vandale, S., Ruiz de Chávez, M.** *Morbilidad en la atención médica primaria en la jurisdicción de Huamantla, Tlaxcala. (Morbidity in primary medical care in the jurisdiction of Huamantla, Tlaxcala).* Salud Pública de México (Mexico City), 23(2), Mar-Apr 1981, 183-197. Span. 19 refs.

In order to obtain more morbidity data for rural Mexico, specially designed records of 14 801 consultations at rural health centres in Huamantla, Tlaxcala, from February 1978-January 1979 are analyzed in terms of age and sex of patient, most commonly encountered conditions, and reasons for the 1st and subsequent visits. These findings are discussed and presented as statistical data. (RMB)

9718 **Nevadomsky, J.** *Patterns of self-reported drug use among secondary school students in Bendel state, Nigeria.* Bulletin on Narcotics (New York), 33(1), 1981, 9-19. Engl. Refs.

Based on a sample of 1 500 secondary school students in Bendel state, Nigeria, this study shows that students disapprove of most forms of drug use among their peers and that very few of them actually use drugs. No clear evidence emerged for the use of heroin, morphine, or cocaine. It was found, however, that chlordiazepoxide (Librium) and diazepam (Valium) are among the most frequently used drugs. One important finding is that there is a kind of "coalescence of drug use" in which certain drugs tend to go together. Statistical data are included. (Modified journal abstract)

9719 **Obi, G.O., Chukudebelu, W.O.** *Iron status of anaemic pregnant Igbo women in Nigeria.* Tropical and Geographical Medicine (Haarlem, Netherlands), 33(2), Jun 1981, 129-133. Engl. 21 refs.

A study was undertaken at the University of Nigeria Teaching Hospital, Enugu, to determine the pattern of anaemia among pregnant Igbo women. The study population consisted of 120 consecutive 1st-time attenders at the antenatal clinic with haemoglobin levels of less than 10%. It was found that 25% of the women had iron deficiency anaemia, 74% megaloblastic anaemia, 7.5% malaria parasites, and one woman had Hb sickle cell disease. This paper presents the study methodology and findings. (HC-L)

9720 **Ogbeide, O.** *Infant mortality in Benin City.* Journal of Tropical Pediatrics (London), 26(5), Oct 1980, 199-202. Engl.

In a prospective study of infant mortality, 407 out of 2 038 infants born at the Specialist Hospital, Benin, Nigeria, and 151 out of 755 infants born at the University of Benin Teaching Hospital were systematically selected and followed-up for 1 year. The former experienced an infant mortality of 71.25:1 000 live births and the latter, 33.11:1 000, giving an overall infant mortality of 60.9: 1 000. (This has been erroneously reported as 43:1 000 in the paper). Leading causes of death were intestinal disorders, measles, pneumonia, fever, and prematurity. This paper discusses the study findings, comparing the two groups with respect to quality of care received, education level of mothers, ratio of neonatal to postnatal deaths, etc. (HC-L)

9721 **Ohlsson, A.** *Sjukdomspanorama vid en allmnpediatrisk mottagning i Saudi-Arabien. (Range of diseases at a public pediatric clinic in Saudi Arabia).* Läkartidningen (Stockholm), 78(37), 9 Sep 1981, 3149-3152. Swedish.

This 2-year survey of pediatric admissions at the King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia, revealed a 16% prevalence of congenital malformations; 32% of these children had severe physical handicaps and 11% were mentally retarded. Factors contributing to this high incidence of deformity include: the endemicity of diseases such as poliomyelitis, schistosomiasis, malaria, and leishmaniasis; the presence of genes for G6PD, thalassemia, and sickle cell anaemia in a large percentage of the population; and the perserverance of cultural practices such as skin cauterization, the application of dung, the painting of the eyelids with kohl, and infant swaddling. Statistical data are included. (Modified journal abstract)

9722 **Onene, J.A., Longe, A.C., Okolo, A.A.** *Seizures in the Nigerian neonate: perinatal factors.* International Journal of Gynaecology and Obstetrics (Baltimore, Md.), 19(3), 1981, 295-299. Engl. 18 refs.

Fifty-five high-risk infants admitted to the Special Care Baby Unit of Benin Teaching Hospital, Benin City, Nigeria, from July 1, 1974-December 31, 1979, who experienced seizures during their hospital stay were studied to determine the frequency, types, and prognosis of this clinical problem. It was found that seizures occurred more frequently in male infants and in those less than 24 hours old with a resulting mortality of 34.5% (19 of 55). A decline in the incidence of seizures is anticipated as soon as antenatal and postpartum services are improved. (DP-E)

9723 **Omu, A.E., Oronsaye, A.U., Faal, M.K., Asuquo, E.E.** *Adolescent induced abortion in Benin City, Nigeria.* International Journal of Gynaecology and Obstetrics (Amsterdam), 19(6), Dec 1981, 495-499. Engl. 16 refs.

Induced adolescent abortion is a major cause of maternal and gynaecologic death in the University of Benin Teaching Hospital, Benin City, Nigeria, where 244 out of 349 such cases seen from January 1, 1974-December 31, 1979 were reviewed. Ignorance and lack of contraceptive facilities were contributory factors. To deal with this problem, the authors advocate sex education and the systematic dissemination of information for planned and conscientious parenthood as well as the free availability of alternative methods of contraception. Interruption of early pregnancy should be an essential component of a national family planning programme. (Modified journal abstract)

9724 **Ottesen, E.A., Weller, P.F., Lunde, M.N., Hussain, R.** *Endemic filariasis on a Pacific island: II: immunologic aspects: immunoglobulin, comple-*

ment, and specific antifilarial IgG, IgM and IgE antibodies. American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(5), Sep 1982, 953-961. Engl. 19 refs.

Sixty-eight individuals from Mauke, Cook Islands, an area hyperendemic for subperiodic bancroftian filariasis, were selected from a larger study population to include the entire clinical spectrum of filarial infection in that region and also an "endemic control" group without clinical or parasitologic evidence of filarial infection. The results, discussed and presented as statistical data, agree with previous findings that lymphocyte proliferative responsiveness from filarial antigens was much greater in individuals of the "non-infected" endemic control population than in patients with filariasis; they also indicate the issues that must be resolved to define the immunologic determinants leading to protective immunity. (Modified journal abstract)

9725 **Overseas Development Council, Washington, D.C.** *Project to reduce infant and child mortality in a rural poverty belt in Hanover, Jamaica.* Cajanus (Kingston, Jamaica), 14(3), 1981, 152-159. Engl.

Originally published in Gwatkin, D.R., Wilcox, J.R., Wray, J.D., Can Health and Nutrition Interventions Make a Difference?, Washington, D.C., Overseas Development Council, Monograph No. 13, 1980.

The Hanover Young Children Nutrition Programme, implemented in Hanover, Jamaica, in 1973, is described and evaluated. After 8 weeks training in basic medical services, nutrition, hygiene, first aid, and family planning, 153 community health aides concentrated on providing nutritional surveillance to all children aged less than 4 years as well as in-home nutrition and hygiene education. The results of the programme, which are discussed and presented as statistical data, show that nutritional status improved and child mortality decreased as a consequence of the aides' activities. (DP-E)

9726 **Pamba, H.O.** *Hookworm and ascariasis infection in Nyanza Province, Kenya.* East African Medical Journal (Nairobi), 57(12), Dec 1980, 891-896. Engl. 12 refs.

In a survey of 6 896 schoolchildren and adults in Nyanza province, Kenya, the prevalence of hookworm was found to be 14.2% and that of *Ascaris lumbricoides*, 17.3%. The results, discussed and presented as statistical data, suggest that children aged 6-15 years play an important role in the transmission and maintenance of these diseases. Improper waste disposal and the depressed socioeconomic conditions of the area were also contributory factors. (Modified journal abstract)

9727 **Pan American Health Organization, Washington, D.C.** *Diarrheal disease in Panama, 1970-1978.* Epidemiological Bulletin (Washington, D.C.), 1(2), 1980, 7-10. Engl.

Panamanian statistical data on morbidity and mortality from diarrheal diseases are presented per 100 000 population by region and age group for the years 1970-1978. Both the increase in morbidity and the decrease in mortality from diarrhea are attributed to the extension of primary health services during the same period, resulting in better reporting on the one hand and prevention of death by early treatment on the other. (HC-L)

9728 **Pandit, A., Bhave, S.** *Prevalence and pattern of handicaps in a rural area.* Indian Pediatrics (Calcutta, India), 18(1), Jan 1981, 35-39. Engl. 9 refs.

A rural population of approximately 30 000 in Pune district, India, was screened for handicap in children by medical social workers especially trained for the survey. The handicapped children were then referred for examination and rehabilitation to a group of specialists. The prevalence of handicap was found to be 10.01%, but only half of the handicapped children came forward for examination. Of those who did, the majority were found to have preventable handicaps: visual disability due to vitamin A deficiency; hearing deficits due to chronic otitis media; paralysis resulting from polio; and physical handicaps due to neglected fractures or infections (osteomyelitis). This paper discusses the survey methodology and findings, emphasizing the importance of detecting disabilities as early as possible. (HC-L)

9729 **Panicker, P.V., Gadkari, A.S., Kulkarni, S.W., Handa, B.K., Joshi, M.W.** *Prevalence of hookworm in some villages around Nagpur.* Journal of Communicable Diseases (New Delhi), 12(4), 1980, 192-196. Engl.

Analysis of stool specimens from 2 365 inhabitants of eight villages near Nagpur, India, revealed a hookworm prevalence of 16.9%-41.8%, with an average of 28.5%. Prevalence increased with age, with low intensity infections much more common. The prevalence of anaemia, eosinophilia, and other symptoms is discussed. Environmental sanitation and health education are recommended for hookworm control. Some statistical data are included. (Modified journal abstract)

9730 **Pareek, S.S., Chowdhury, M.N.** *Sexually transmitted diseases in Riyadh, Saudi Arabia; a study of patients attending a teaching hospital clinic.* British Journal of Venereal Diseases (London), 57(5), 1981, 343-345. Engl. 13 refs.

Of 716 men attending consecutively a dermato-venereological clinic in Riyadh, Saudi Arabia, from December 1978-December 1979, 70.1% had non-specific genital infection, a figure that is 4 times that for gonorrhea and 13 times that for syphilis. Most of the patients were single men aged 20-29 years and had acquired these infections abroad. Although Riyadh is a cosmopolitan city with a large foreign population, 79% of the infections occurred in local inhabitants. (Modified journal abstract)

9731 **Patrick, V., Patrick, W.K.** *Cyclone '78 in Sri Lanka — the mental health trail.* British Journal of Psychiatry (London), 138(3), 1981, 210-216. Engl. Refs.

A longitudinal study of psychological disturbance in the

affected population in Sri Lanka after the cyclone disaster of 1978 was carried out. The post-cyclonic stress identified among the rural communities after their return to the same destroyed environment was studied. Symptoms tended to be early or delayed in appearance. The degree of unpreparedness is postulated as the cause of the former. Group cohesiveness and feelings of community tended to delay the manifestations of symptoms. Realization of losses, family needs, and continued habitation in damaged homes acted as reminders and reinforcers. Morbidity continued to affect over half of the population 1 year later. Early intervention in such cases is recommended. Some statistical data are included. (Modified journal abstract)

9732 **Peck, R.E., Chuang, M., Robbins, G.E., Nicholman, M.Z.** *Nutritional status of Southeast Asian refugee children.* American Journal of Public Health (New York), 71(10), Oct 1981, 1144-1148. Engl. 11 refs.

This article reports on a survey undertaken at four US clinics where 821 Southeast Asian preschool refugee children arrived from July 1979-June 1980. Haemoglobin and haematocrit determinations and three anthropometric indices (height:age, weight:age, and weight:height) were used to describe the nature and extent of anaemia and protein-energy malnutrition among the subjects. Comparison was made to similar data collected from 1 100 children of Asian descent screened prior to 1979 and to that of a National Health Examination Survey reference group. While the newly-arrived refugee group was found to be highly anaemic and stunted, they did not appear greatly wasted. Six tables and three figures are used in the discussion of findings. (EB)

9733 **Pereira da Costa, D.P., Simões Barbosa, F.** *Esquistossomose em trabalhadores da Usina Catende, Pernambuco, Brasil. (Schistosomiasis in the Catende sugar mill plantation workers in Pernambuco, Brazil).* Revista de Saúde Pública (São Paulo, Brazil), 14(4), Dec 1980, 469-474. Portuguese. 10 refs.

Examination for *Schistosoma mansoni* was carried out on stool samples from almost 3 000 individuals on nine sugar plantations in the humid coastal forest region of the state of Pernambuco, Brazil. The results indicated an overall infection rate of 43.8%. Clinical and fecal examination of 730 field workers revealed an infection rate of 65.6% and a hepatosplenic rate of 4.1% (as high as 8.7% and 9.1% in two plantations, respectively). The age and sex distribution of infected persons are tabulated. *Biomphalaria straminea*, the only vector in the area, was found to have an infection rate of 0.07%. Statistical data are included. (HC-L)

9734 **Power, D.J., Wolf, E., Van Coeverden de Groot, H.A.** *Early discharge from maternity units in Cape Town.* South African Medical Journal (Cape Town), 58(22), 29 Nov 1980, 893-895. Engl. 10 refs.

With an aim to obtaining local data regarding the effects of early discharge on mother and infant, 323 mothers were interviewed at home about 12 days after discharge from maternity hospitals and midwife obstetric units in Cape Town during March-July 1978. The group, representative of lower middle and working class mothers, was questioned on its views regarding antenatal care, delivery, feeding patterns, and contraceptive advice and about problems at home. The study concludes that early discharge of suitably selected mothers and babies is safe. (EB)

9735 **Prasad, S.** *Survey of leprosy deformities in a closed community.* Leprosy in India (New Delhi), 53(4), Oct 1981, 626-633. Engl. 15 refs.

A study of 200 leprosy patients with permanent deformities living in a closed community of a project area of the Leprosy Control Unit in Raxaul (Bihar, India) was undertaken to determine the strength of patients requiring various reconstructive surgical procedures and to help patients in rehabilitation. Using the three tables of data, this report describes patient evaluation and examination, age distribution, and types of hand, foot and miscellaneous deformities. The findings are compared with observations on prevalence rates and incidence patterns of deformities reported by several previous studies. (EB)

9736 **Puthavathana, P., Vanprapar, N., Thakerngpol, K., Wasi, C., Thongcharoen, P.** *Rotavirus infection in Thai people: a preliminary study.* Journal of the Medical Association of Thailand (Bangkok), 64(7), Jul 1981, 341-344. Engl. 19 refs.

In 1979, at Siriraj Hospital in Bangkok, a preliminary investigation was undertaken to study the prevalence of rotavirus infection in Thai people. Rotavirus antibodies were identified in sera from 184 individuals of various age groups. Stools from 50 children aged less than 1 year were examined by electron microscopy; 22 (44%) contained rotavirus particles. Incidence of infection increased by age and peaked (70%) in children aged 1-5 years; after that the frequency of positive antibodies was maintained in all age groups observed. Reference is made to the findings of similar studies. It is suggested that investigation of rotavirus on a wider scale is needed to establish epidemiological information for all of Thailand. (EB)

9737 **Putrali, J., Daza, B.C., Hardjawidjaja, L., Sudomo, M., Barodji, A.** *Schistosomiasis pilot control project in Lundu Valley, central Sulawesi, Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 11(4), Dec 1980, 480-486. Engl. 12 refs.

The possibility of *Schistosoma japonicum* transmission spreading from a known focus to a new irrigation project in Indonesia led to the testing of possible control measures in 1975 at the village of Anca; the untreated village of Langko was used for comparison. Snail control and chemotherapy were implemented in early 1975 and evaluated 19 months later. Molluscicide had little effect, but niridazole treatment, as used, was safe and had a significant effect on *S. japonicum* transmission; schistosoma prevalence dropped from 71%-26% in Anca com-

pared to 54%-44% in Langko. The authors calculated that complete suppression of transmission would eliminate all worms from the human population within 5 years. Statistical data are included. (Modified journal abstract)

9738 **Rahaman, M.M., Majid, M.A., Monsur, K.A.** *Evaluation of two intravenous rehydration solutions in cholera and non-cholera diarrhoea.* Bulletin of the World Health Organization (Geneva), 57(6), 1979, 977-981. Engl. 10 refs.

The performance of two intravenous rehydration solutions was compared with respect to 126 male patients aged more than 2 years, 80 of them suffering from cholera and 46 from other diarrheas. Half the patients received the new diarrhea treatment solution (DTS) containing sodium at concentrations of 118 mmol:litre and glucose 44 mmol:litre and the other half, the usual Dacca solution (DS) containing a sodium concentration of 133 mmol:litre and no glucose. All patients made an uneventful recovery and no significant difference in clinical response or in levels of serum sodium between the two groups could be discerned. Both are therefore considered suitable, with the qualification that in patients with compromised renal function, DS has the potential for producing salt intoxication if enough water is not taken orally along with it. Some discussion of suitable glucose levels is included. (HC-L)

9739 **Rahamathullah, V.** *Trends in births and deaths in South Indian plantations.* Tropical Doctor (London), 11(4), Oct 1981, 173-174. Engl.

A survey of 102 063 plantation workers in south India revealed that birth and death rates in this population are showing a downward trend. This is the more significant in that the data are for one socioeconomic group in the plantation, i.e., the labourers, and are not influenced by the performance of the higher socioeconomic groups. The author concludes that the integrated approach to health in south India plantations is effective in reducing fertility and mortality. Some statistical data are included. (Modified journal abstract)

9740 **Rajatasilpin, A., Tantasuphasiri, S., Suanpan, S.** *Assessment of nutritive values of common Thai supplementary foods.* Journal of the Medical Association of Thailand (Bangkok), 64(1), Jan 1981, 42-48. Engl. 21 refs.

Eight common Thai weaning foods were assessed for their nutritive value in terms of calories, protein, and essential amino acids. The nutritive value of each food in combination with human milk was then compared with the standard requirement for an infant aged 6 months. Some of the foods were judged better than others in terms of quality (i.e., protein) but all of them, even when served twice a day, were deemed inadequate in quantity (i.e., calories). It is therefore suggested that the slowdown in infant growth that commonly occurs in Thai infants at age 6 months is due to the quantitative inadequacy of food supplementation. Six tables of data are included. (HC-L)

9741 **Ranuh, I.G.** *Nutritional status of elementary school children in Surabaya.* Surabaya, Ministry of Health, 1975. 53p. Engl.

In order to provide basic data to planners responsible for the nutrition programme in Indonesia, a survey was conducted jointly by the Institute of Public Health in Surabaya, the Airlangga University School of Medicine, and the Naval Institute of Psychology. The nutritional status of 4 500 urban and rural children aged 7-9 years was evaluated by means of clinical, anthropometric, and biological examinations. The socioeconomic status, daily food intake, and mental development of the children were also taken into consideration to find possible correlations between nutritional status and background factors. Twenty-one tables of data from the study are presented and statistical calculations of the observations are detailed in the appendix. (EB)

9742 **Reacher, M., Campbell, C.C., Freeman, J., Doberstyn, E.B., Brandling-Bennett, A.D.** *Drug therapy for* Plasmodium falciparum *malaria resistant to pyrimethamine-sulfadoxine (Fansidar); a study of alternate regimens in eastern Thailand, 1980.* Lancet (London), II(8255), 14 Nov 1981, 1066-1069. Engl. 13 refs.

A trial of drug regimens for treating *Plasmodium falciparum* malaria was conducted in a Thai refugee camp where extensive Fansidar (pyrimethamine-sulfadoxine) resistance had been demonstrated. The efficacy of quinine alone was compared to that of quinine with fansidar or tetracycline. Only the combination of quinine and tetracycline was 100% effective in curing malaria. Statistical data are included. (Modified journal abstract)

9743 **Ree, G.H.** *Ocular leprosy in Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 23(4), Dec 1980, 182-185. Engl. 9 Refs.

Two hundred and thirty-four unselected patients attending the Port Moresby (Papua new Guinea) leprosy treatment centre were examined for potentially sight-threatening complications of leprosy, namely, keratitis, iritis (old and active), lagophthalmos, and corneal anaesthesia. The patients were classified for ophthalmological purposes into three groups: lepromatous, borderline, and tuberculoid. Eye involvement was found in 24.2% of the 165 men and 20.9% of the 69 women and detailed findings in relation to type of leprosy and duration of treatment are shown in a series of tables. (Modified journal abstract)

9744 **Riley, I.D., Everingham, F.A., Smith, D.E., Douglas, R.M.** *Immunisation with a polyvalent pneumococcal vaccine; effect on respiratory mortality in children living in the New Guinea highlands.* Archives of Disease in Childhood (London), 56(5), 1981, 354-357. Engl. 11 refs.

In Tari, Papua New Guinea, from 1972-1973, each child experienced, on average, two acute lower respiratory tract infections (ALRTI) between birth and 5 years of age. The yearly mortality from ALRTI was 30:1 000 infants and 4:%1 000 children aged 1-4 years. In May

1974, a double-blind controlled trial of a 14-valent pneumococcal polysaccharide vaccine was carried out on 871 children from this community. Morbidity from ALRTI was 37% lower in vaccinated children if vaccinated after 17 months of age. There were 8 deaths from ALRTI in the placebo group, but only 1 death in the vaccine group. Statistical data are included. (Modified journal abstract)

9745 **Riverón-Corteguera, R., Gutierrez Muñiz, J.A., Valdés Lazo, F.** *Mortalidad infantil en Cuba, 1970-1979. (Infant mortality in Cuba, 1970-1979).* Revista Cubana de Administración de Salud (Havana), 7(2), Apr-Jun 1981, 143-152. Span. 23 refs.

This paper outlines the social, public health, and medical factors responsible for the reduction of infant mortality in Cuba from 38.8:1 000 live births in 1970 to 19.4 in 1979. Data are further broken down and considered by age of death (early neonatal, late neonatal, and post-neonatal) and province, while alterations in the leading causes of death are indicated. (HC-L)

9746 **Roberts, A.B., Roberts, P., Tira, T., Tulimanu, K.** *Malnutrition and anaemia in Gilbertese pre-school children: a case-finding and epidemiological survey.* Journal of Tropical Pediatrics (London), 27(2), Apr 1981, 78-82. Engl.

In a 1976-1978 survey of 830 children in four rural villages in the Gilbert Islands, 15.1% had a weight-for-age that was less than 80% of the Harvard standard, and 18.6% were anaemic with haemoglobin concentration of less than 10 g:100 ml. The diet of children in the northern, rural islands was found to be of higher protein and iron content than in the urbanized villages. Hookworm infection was common (prevalence rate 42.3%) in the rural villages of the northern islands where the climate was wetter. Statistical data are included. (Modified journal abstract)

9747 **Rochat, R.W., Jabeen, S., Rosenberg, M.J., Measham, A.R., Khan, A.R.** *Maternal and abortion related deaths in Bangladesh, 1978-1879.* International Journal of Gynaecology and Obstetrics (Baltimore, Md.), 19(2), 1981, 155-164. Engl. 9 refs.

From December 1978-May 1979, 1 118 health workers in 63 hospitals and 732 non-hospital facilities were interviewed to identify case reports of maternal and abortion-related deaths in Bangladesh. Of 1 933 pregnancy-related deaths identified (about 7.5% of those nationally), 498 (25.8%) were due to induced abortion. It is concluded that safe and effective fertility control, including abortion performed by adequately trained health workers, might be the most appropriate 1st step in preventing pregnancy-related deaths in Bangladesh. Statistical data are included. (Modified journal abstract)

9748 **Rugemalila, J.B., Eyakuze, V.M.** *Use of metrifonate for selective population chemotherapy against urinary schistosomiasis in an endemic area at Mwanza, Tanzania.* East African Medical Journal (Nairobi), 58(1), Jan 1981, 37-43. Engl.

A fortnightly treatment with metrifonate (3 doses of 10 mg:kg of body weight) was given to 2 256 people excreting *Schistosoma haemotobium* eggs and resident in an endemic area of Tanzania. Drowsiness, nausea/vomiting, and weakness, all of which were mild, transient, and infrequent, were observed as possible side effects. Treatment compliance for one, two, and three doses were 23%, 25%, and 31%, respectively. Post treatment follow-ups at 6 and 12 months showed cure rates of over 70% and egg reduction rates of 79%-92% among those completing three and two doses. The authors recommend metrifonate for clinical and selective population chemotherapy for schistosomiasis haematobia. Statistical data are included. (Modified journal abstract)

9749 **Russel, S., Krishna Murthy, P., Rao, C.K.** *Changing pattern of filarial infections in Srihari-kota (Andhra Pradesh).* Journal of Communicable Diseases (New Delhi), 11(2), 1979, 91-93. Engl.

In India, *Brugia malayi* filariasis is known to have been limited to small pockets in the states of Kerala, Andhra Pradesh, Tamil Nadu, Orissa, Madhya Pradesh, and Assam. Even in these foci, its prevalence has shown a downward trend during recent years. A natural decline of the infection rate has been reported in the *B. malayi* endemic areas of Kerala. Reexamination in 1975 of the population in Sakhigopal village, Orissa, reported to have had *B. malayi* infection in 1954-1955, showed that the species has disappeared from this area. (Modified journal abstract)

9750 **Schoepfer, M., Garnier, R., Ropero, P., Traore, M., Gateff, C.** *Indices anthropométriques nutritionnels et ration alimentaire d'une population infantile du sud de la Côte-d'Ivoire. (Anthropometric nutritional indices and food intake of a child population in south Ivory Coast).* Médecine Tropicale (Marseilles, France), 41(4), Jul-Aug 1981, 395-402. Fren.

With an aim to determining new biochemical or immunological parameters to be used for early diagnosis of protein-calorie malnutrition, a study of 652 children aged 1-3 years was undertaken in the southern area of the Ivory Coast. Anthropometric measurements were taken and quantitative evaluation of daily nutritional food intakes was made on the subjects, who were divided into 3 groups according to the following criteria: properly nourished children, malnourished children without physical signs of malnutrition, and malnourished children with malnutrition signs. Five tables of data from the study are presented and discussed. The paper concludes with a brief presentation of three specific findings regarding the children's age, anthropometrics, and food intake. (EB)

9751 **Schutte, C.H., Van Deventer, J.M., Lamprecht, T.** *Cross-sectional study on the prevalence and intensity of infection with* Schistosoma haematobium *in students of northern Kwazulu.* Ameri-

can Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(2), Mar 1981, 364-372. Engl. 33 refs.

In a 1976-1978 study of *Schistosoma haematobium* infection, urine samples from 7 944 students aged 5-25 years from 42 different localities in northern KwaZulu (South Africa) were screened. While 54.4% (4 332 subjects) were found to be infected, the prevalance varied from 8%-92% depending on local conditions, with the availability of piped water showing a marked effect on both the prevalence of infection and the level of urinary egg output. Statistical analysis of the results showed that a prevalence of *S. haematobium* infection was dependent on area and age of subjects but not upon sex. Reference is made to previous studies of this kind in Africa. (Modified journal abstract)

9752 **Sengupta, P.G., Sen, D., Saha, M.R., Niyogi, S., Deb, B.C.** *Epidemic of rotavirus diarrhoea in Manipur, India.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 75(4), 1981, 521-523. Engl.

Of 481 cases of diarrhea seen at the Regional Medical College Hospital, Imphal, Manipur, India, during a 1979 outbreak, 93% were in children aged less than 2 years. Many patients had upper respiratory symptoms, vomiting, and dehydration as well as diarrhea. Microbiological examination by the ELISA technique of 59 stool samples revealed that 53 contained rotaviruses, which were apparently a major pathogen in the epidemic. Some statistical data are included. (Modified journal abstract)

9753 **Seo, B.S.** *Ascariasis and its control problems in Korea.* Seoul Journal of Medicine (Seoul), 22(3), Sep 1981, 323-341. Engl. Refs.

The biological and epidemiological characteristics of *Ascaris lumbricoides* and its control are discussed in terms of the project programme of ascariasis control in Hwasung (Republic of Korea) from 1977-1980. Treatment by chemotherapy (with an emphasis on repeated mass treatments) is discussed in some detail. Copious statistical data are included. (DP-E)

9754 **Serour, G.I., Younis, N.M., Hefnawi, F., El-Bahy, M., Dagistany, H.F.** *Perinatal mortality in an Egyptian maternity hospital.* International Journal of Gynaecology and Obstetrics (Amsterdam), 19(6), Dec 1981, 447-451. Engl. 16 refs.

Factors affecting perinatal mortality were studied at the Al-Galaa maternity hospital, Egypt, from March 1, 1977-November 15, 1978; during this period there were 6 990 deliveries and 580 hospital perinatal deaths. The results are discussed and presented as statistical data. Perinatal mortality was found to be higher among male infants born to women who were referred by traditional birth attendants, who had received no antenatal care, who were older than 35 and/or completely uneducated, and who had a history of poor obstetric performance and/or three or more previous deliveries. (DP-E)

9755 **Shield, J.M., Smith, D., Heywood, P.** *Prevalence of alimentary helminthiasis and its association with nutritional status in children under five years old in the highlands of Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 24(1), Mar 1981, 40-44. Engl. 13 refs.

Helminth egg counts in fecal samples from 137 children aged less than 5 years in the Tari Valley of the Papua New Guinea highlands revealed that 78% were infected with one or more of *Ascaris lumbricoides*, *Trichuris trichuria*, and hookworm (probably *Necator americanus*). The results are discussed and presented as statistical data. There was a statistically significant association between moderate-to-high hookworm egg count and malnutrition. (Modified journal abstract)

9756 **Simmons, W.K.** *Nutritional anaemia in Jamaica; part I: studies conducted and their results.* Cajanus (Kingston, Jamaica), 13(4), 1980, 204-219 Engl. 37 refs.
Originally published in The West Indian Medical Journal, 28(4), 1979.

This paper reviews the various investigations into nutritional anaemia that have been carried out in Jamaica over a 24-year period (1951-1975). Although there has been no complete island survey of haemoglobin levels and the studies under review have used various methodologies, a correlation of their findings indicates that iron deficiency is probably the commonest cause of nutritional anaemia in Jamaica, affecting mostly infants aged 0-18 months and pregnant and lactating women. With appropriate public health measures — such as a food fortification programme — its incidence could be reduced. (HC-L)

9757 **Singh, P.J., Guatee, C., John, R.** *Infant health care practices — a study in three communities.* Medical Journal of Malaysia (Singapore), 36(3), Sep 1981, 166-170. Engl.

A cohort of 90 infants born in March 1979 in three rural communities in Malaysia was followed-up by means of monthly visits in order to obtain information on socioeconomic status, infant feeding, and health practices. The visits yielded the following information: breast-feeding was widely practiced but, in most cases, solids were introduced too early; people tended to seek modern treatment for respiratory ailments, diarrhea, and scabies but traditional treatment for measles in the belief that it is aggravated by modern medical care; and self-care with analgesics and penicillin cream was widely practiced. The implications of these and other findings for a health education programme are discussed. (HC-L)

9758 **Snyder, J.D., Black, R.E., Baqui, A.H., Sarder, A.M.** *Prevalence of residual paralysis from paralytic poliomyelitis in a rural population of Bangladesh.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(2), Mar 1981, 426-430. Engl. 20 refs.

To estimate the prevalence of residual paralysis from poliomyelitis in children in one area of rural Bangladesh,

a survey of the amount and the original cause of lameness was undertaken in a population of 25 000 children aged 5-14 years. The cause of the lameness identified for a child in the survey was based on criteria obtained from a health history questionnaire and a physical examination performed by a physician. The prevalence rate for all cases of residual paralysis of poliomyelitis was calculated to be 1.05:1 000 children in this age group. Statistical data are included. (Modified journal abstract)

9759 **Soothill, P.W., Preece, M.A., Arole, M., Arole, R.** *Controlled study of the effect of an Indian comprehensive rural health project on the children's arm circumference, adjusted for height.* Journal of Tropical Pediatrics (London), 26(6), Dec 1980, 243-245. Engl.

In July and August 1978, the arm circumference adjusted for height was measured on 232 children living in four villages participating in the Comprehensive Rural Health Project in Jamkhed, India, and compared with the measurements taken from 311 children from similar villages outside the project. The participants included 255 girls and 288 boys aged 1-5 years, from 70-130 cm in height. No significant difference was found between the measurements of the Health Project group and those of the non-project group, although there was a difference in the slope of the arm circumference:height relationship between girls and boys. The authors suggest that further studies are needed to identify factors still limiting the growth of children in the project villages. (EB)

9760 **Soramani, S., Schelp, F.P., Vivatanaseth, P., Pongpaew, P., Sritabutra, P.** *Investigation of the health and nutritional status of the population in the Nam Pong Water Resource Development Project, northeast Thailand.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(3), 1981, 335-346. Engl. 16 refs.

A study was undertaken to assess the health of persons living in four distinct areas benefitting to a greater or lesser degree from the Nam Pong Resource Development Project, Thailand (a dam built for power and agricultural purposes). The study included surveys of parasitic infestation, haemoglobin level, nutrition status, urinary urea-N creatine (U-C) ratio, levels of vitamin B1 and B2, and hydroxyproline (HOP) index. This paper presents and discusses 12 tables of study findings. Significant differences in income levels between the four populations were observed, but these were not reflected in the prevalence of either parasitic infestation or anaemia, which were approximately 40% and 30%, respectively, in all areas. (HC-L)

9761 **Stafford, E.E., Dennis, D.T., Masri, S., Sudomo, M.** *Intestinal and blood parasites in the Torro Valley, Central Sulawesi, Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 11(4), Dec 1980, 468-472. Engl. 13 refs.

Approximately 300 blood and fecal specimens were examined in a parasitological survey of indigenous inhabitants of the small isolated Torro Valley (population 1 147), Sulawesi, Indonesia. *Schistosoma japonicum* — the stimulus for the study — was not found, although its presence cannot be ruled out due to the size of the sample surveyed (25% of the population). Prevalence and kind of parasites identified included: hookworm, 71%; *Brugia malayi*, 25%; *Entamoeba coli*, 23%; *Giardia lamblia*, 14%; *Endolomax nana*, 9%; *Iodamoeba butschii*, 9%; *E. histolytica*, 8%; *Plasmodium vivax*, 4%; *P. falciparum*, 2%; ascariasis, 3%; and trichuriasis, 2%. The high rate of splenic and hepatic enlargement observed is attributed to the effects of endemic malaria and hereditary ovalocytosis. (HC-L)

9762 **Stanghellini, A., Duvallet, G.** *Epidémiologie de la trypanosomiase humaine à* Trypanosoma gambiense *dans un foyer de Côte d'Ivoire; 1: distribution de la maladie dans la population. (Epidemiology of human trypanosomiasis due to* Trypanosoma gambiense *in an Ivory Coast focus; 1: the distribution of the disease in the population).* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 32(3), 1981, 141-144. Fren. 16 refs.

In this study of the distribution of human trypanosomiasis in the Ivory Coast, 5 519 inhabitants (aged 15-39 years), including a large number of immigrant workers from Upper Volta, of six villages in the region of Vavoua were examined from 1977-1979. The survey methodology is outlined and three comparison tables are used in the discussion of the results. The findings indicated that the highest incidence of sleeping sickness occurred among men aged 10-30 years and among the immigrant Mossi ethnic group. Vector transmission occurred mainly in plantations rather than in villages. (EB)

9763 **Stanley, S.J., Howland, C., Stone, M.M., Sutherland, I.** *BCG vaccination of children against leprosy in Uganda: final results.* Journal of Hygiene (Cambridge, UK), 87(2), 1981, 233-248. Engl. 21 refs.

This report presents the final results of a large, controlled trial, begun in 1960 in the Teso district in eastern Uganda, that aimed to assess the role of BCG vaccination in leprosy prevention in children of high risk due to their greater exposure (to relatives with leprosy) or greater genetic disposition. The study, involving 19 014 children aged less than 14 years, consisted of vaccination and examination carried out from 1960-1962 and four follow-up examinations of a large proportion of the children in the tuberculin-negative or weakly positive groups, ending in 1970. Information gathered between 1970-1975 is also presented, with 8 tables being used in the discussion of results. The protective effect of BCG vaccination appeared to continue over the 8-year period, although there seemed to be no preventive value once a leprosy lesion had begun to develop. Comparison is made with similar studies conducted in Burma (1964) and in Papua New Guinea (1962). (EB)

9764 **Stein, H., Rosen, E.U.** *Changing trends in child health in Soweto; the Baragwanath Hospital picture.* South African Medical Journal (Cape Town), 58(26), 27 Dec 1980, 1030-1032. Engl. 11 refs.

Using admissions and mortality statistics from the Baragwanath Hospital in Soweto, South Africa, the authors discuss some of the many trends in child health between 1950-1978 as viewed from a hospital perspective. While preventable disease among Soweto children is still prevalent, infant mortality and the incidence of malnutrition, rickets, and gastroenteritis have decreased. The 1978 incidence of rheumatic fever and pneumonia remains high; bronchiolitis and glomerulonephritis were each responsible for just under 5% of the 10 872 admissions in that year. Improved socioeconomic conditions may be reflected in decreased incidence of low-birth-weight babies in recent years. Reference is made to several previous studies in this area. (EB)

9765 **Stetler, H.C., Trowbridge, F.L., Huong, A.Y.** *Anthropometric nutrition status and diarrhea prevalence in children in El Salvador.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(4), Jul 1981, 888-893. Engl. 17 refs.

Data are presented to quantify the relationship between nutritional status and diarrheal disease reported in a 1-week period in children in El Salvador. A strong association was observed between reported diarrhea and combined wasting (defined by low weight-for-height) and stunting (defined by low height-for-age). There were also significant associations between reported diarrhea and wasting alone, low weight-for-age, and low arm circumference, although short stature by itself does not appear to be a risk factor for diarrhea. Previously defined seasonal patterns of malnutrition for El Salvador were confirmed and appear to have implications for the targeting and timing of nutrition interventions. Statistical data are included. (Modified journal abstract)

9766 **Stewart, T., May, P., Muneta, A.** *Navajo health consumer survey.* Medical Care (Philadelphia, Pa.), 18(12), Dec 1980, 1183-1195. Engl. 11 refs.

The findings of this health consumer survey of 309 US Navajo families show that access to facilities and lack of safe water and sanitary supplies are continuing problems. While the families show consistent use of Indian Health Service providers, particularly nurses, pharmacists, and physicians, as well as traditional Navajo medical practitioners, only incidental utilization of private medical services is reported. Extended waiting times and translation from English to Navajo are major concerns in their contacts with providers. Comparisons with surveys from other disadvantaged groups indicate somewhat lower utilization rates and more problems in access to care for this Navajo sample. Statistical data are included. (Modified journal abstract)

9767 **Sudomo, M., Liat, L.B., Sustriayu, N., Bang, Y.H.** *Survey of filiariasis at Waru village and Babulu Darat Transmigration Scheme, East Kalimantan.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 11(4), Dec 1980, 451-460. Engl. Refs.

Comparison of the results of surveys of Waru village and a newly established Babulu Darat Transmigration Scheme at Waru District, Indonesia, revealed Brugian filariasis prevalence rates of 9.3% and 0.4%, respectively. These findings are discussed and presented as statistical data. This study also examines the materials and methods and sets forth the results of entomological and parasitological surveys. (DP-E)

9768 **Supramaniam, V.** *Malaria in Malaysian soldiers, 1980.* Medical Journal of Malaysia (Singapore), 36(3), Sep 1981, 136-141. Engl. 18 refs.

In 1980, 964 new cases of malaria among soldiers in the Malaysian army were notified, giving an annual incidence of 11.81:1 000 soldiers. Of these, 63% were *Plasmodium falciparum*, 36% were *P. vivax*, and one case was *P. malariae*. This paper analyzes and discusses the data and documents some 22 drug regimens that were used in treatment. Poor drug compliance and parasite resistance are implicated in the large number of new cases and improved therapeutic measures and more precise mapping of the distribution of chloroquine-resistant strains of *P. falciparum* are called for. Since mass screening for carriers yielded only 5.09 cases of malaria per 1 000 soldiers screened, selective screening in high-risk areas is recommended. (HC-L)

9769 **Tada, I., Otsuji, Y., Harada, R., Mimori, T., Fukumoto, H.** *Skin test study of bancroftian filariasis in Kuroshima island, Okinawa: a 13-year longitudinal study during a control campaign.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(5), Sep 1982, 962-967. Engl. 17 refs.

Evaluation by blood survey and skin tests of the inhabitants of Kuroshima Island (Japan), an area endemic for bancroftian filariasis, reveals that, as a result of the 1967-1980 filariasis control programme based on the selective administration of diethylcarbamazine to positive cases, the initial microfilarial rate of 13.2% had been reduced to almost zero by 1970. Survey and test results are discussed and presented as statistical data. The age distribution of skin-test positivity changed from year to year, especially in the younger age groups. A marked reduction was also seen in the positive rate in those aged 0-9 and 10-19 years. (Modified journal abstract)

9770 **Taticheff, S., Abdulahi, Y., Haile-Meskal, F.** *Intestinal parasitic infection in pre-school children in Addis Ababa.* Ethiopian Medical Journal (Addis Ababa), 19(2), Apr 1981, 35-40. Engl.

During April-August 1978, stool specimens of 1 059 preschool children from six zones of Addis Ababa (Ethiopia) were examined to determine the most prevalent intestinal parasites. The children were classified into four socioeconomic groups. *Ascaris lumbricoides* was found in 488 cases (46.1%) and *Trichuris trichiura* in 421 (39.8%). While 72% of the children were infected by one or more of the 12 types of parasites found, there

was no marked difference in the prevalence of parasites among the six city zones. The survey results are presented in three tables. In conclusion, the authors stress the need for improvements in environmental sanitation to make possible a reduction in parasite transmission. (EB)

9771 **Taylor, H.R., Langham, M.E., de Stahl, E.M., Figueroa, L.N., Beltranena, F.** *Chemotherapy of onchocerciasis: a controlled clinical trial of topical diethylcarbamazine (DEC) in Guatemala.* Tropenmedizin und Parasitologie (Stuttgart, Germany FR), 31(3), 1980, 357-364. Engl. Refs.

A double-masked, controlled clinical trial was conducted in Guatemala to assess the safety and efficacy of diethylcarbamazine (DEC) lotion as compared to placebo lotion in the treatment of onchocerciasis in 187 subjects, who were followed for 2 months. Lotion was applied daily for 7 days, then weekly for 7 weeks. The decrease in mean microfilarial counts per skin snip was significantly greater in those receiving DEC lotion. The proportionate reduction in microfilarial counts were similar for people with light, moderate, or heavy microfilarial loads. Side effects were mainly related to skin snips, fever, and malaise, and occurred in nearly 35% of the people receiving DEC lotion. Statistical data are included. (Modified journal abstract)

9772 **Thimmayamma, B.V., Vidyavati, M., Belavady, B.** *Infant feeding practices of working mothers in an urban area.* Indian Journal of Medical Research (New Delhi), 72(6), Dec 1980, 834-839. Engl.

Information on infant feeding practices collected from 410 educated working mothers in Hyberabad, India, revealed that the mean duration of breast-feeding was 4.1 months. Although more than 90% of the women recognized that breast milk is the best for infants, 61% used commercial baby foods despite reported problems. Because of difficulties associated with working outside the home, the women stressed the importance of the joint family as a source of child care. They also expressed a desire for day care facilities, more nursing breaks, and more part-time jobs that could be combined with child care. Statistical data are included. (Modified journal abstract)

9773 **Thomas, G.C.** *Social background of childhood nutrition in the Ciskei.* Social Science and Medicine (Aberdeen, UK), 15A(5), Sep 1981, 551-555. Engl. 8 refs.

Some socioeconomic factors in 216 well-nourished children, 70 children with low weight-for-age but without signs of kwashiorkor or marasmus, and 223 children with obvious kwashiorkor were compared in this study at St. Mattew's Hospital, Ciskei, South Africa. The well-nourished and stunted children came from very similar homes, except that the stunted children were poorer. Typically they were in the care of their own mothers and supported by their fathers. The children with kwashiorkor generally came from broken, disorganized homes. It was concluded that the main cause of low weight-for-age in the Ciskei is poverty, while the main cause of kwashiorkor is the disruption of family life, associated with the migrant labour system and occuring in a poverty situation. Statistical data are included. (Modified journal abstract)

9774 **Tomkins, A.** *Nutritional status and severity of diarrhoea among pre-school children in rural Nigeria.* Lancet (London), I(8225), 18 Apr 1981, 860-862. Engl. 15 refs.

The influence of preexisting malnutrition on the severity of diarrhea was investigated by assessing attack rate and duration in 343 children aged 6-32 months at the beginning of the rainy season in Malumfashi village, northern Nigeria. There were 1.4 attacks of diarrhea per child during the 3 month rainy season and children spent 10.5% of the time with diarrhea. The frequency was not increased in underweight or stunted children, but those who were wasted experienced 47% more episodes of diarrhea. However, preexisting malnutrition affected the duration of diarrhea, which was 33%, 37%, and 79% longer in underweight, stunted, and wasted children, respectively. (Modified journal abstract)

9775 **Toro, R.J., Cedillos, R.A., Camejo, T., Cardozo, J.V.** *Estudio socio-económico en varias comunidades de los estados Cojedes y Portuguesa. (Socioeconomic study in various communities in the states of Cojedes and Portuguesa).* Boletín de la Dirección de Malariología y Saneamiento Ambiental (), 21(1), Mar 1981, 59-68. Span.

This is a preliminary evaluation of the Venezuela's rural housing programme, one of whose goals was the reduction of trypanosomiasis transmission, carried out by means of a questionnaire of inhabitants of 200 of the new houses (made of cement blocks with tin roofs) compared to 200 traditional houses (mostly of mud-and-wattle with metal or palm roofs). Although the findings concerning the health of their inhabitants are somewhat invalidated by the fact that selection policies for the housing project favoured higher income families, the new houses contained fewer domestic animals and vermin, and only 9% showed the presence of triatomine bugs, compared to 55.2% of the traditional houses. Statistical data are included. (Modified journal abstract)

9776 **Trowbridge, F.L., Stetler, H.C.** *Results of nutritional status surveillance in El Salvador, 1975-77.* Bulletin of the World Health Organization (Geneva), 60(3), 1982, 433-440. Engl. Refs. Also published in French and Spanish.

Nutritional status surveillance data based on the clinical diagnosis of malnutrition and on weight-for-age, as well as diarrheal disease data for preschool children attending government health clinics in El Salvador, are presented for a 3-year period (1975-1977). Surveillance results indicated consistently higher rates of clinical malnutrition and weight-for-age deficit in rural children as compared with urban children, and higher malnutrition rates in children aged 1-4 years as compared with infants aged less than 1 year. Seasonal differences, often related to diarrhea, are also noted. Possible use of the

information thus obtained is discussed. Statistical data are included. (Modified journal abstract)

9777 **Ulfah, N.M., Parastho, S., Sadjimin, T., Rohde, J.E.** *Polio and lameness in Yogyakarta, Indonesia.* International Journal of Epidemiology (Oxford, UK), 10(2), 1981, 171-175. Engl. 9 refs.

A survey involving over 16 000 families was conducted in central Java in order to determine the prevalence of residual paralysis due to polio. Each family head was interviewed regarding lameness in any family member, age of onset, and precipitating illness and all reported cases aged less than 20 years were clinically examined. The prevalence rate for polio-caused paralysis was 9: 10 000 overall, but 22:10 000 in the group aged 2-3 years, reflecting the rising incidence of the disease. The study questionnaire, which correctly identified 42 of the 50 proven cases, is considered a useful tool for determining both prevalence of polio residual lameness and trends in disease incidence. (HC-L)

9778 **Universidad de Guayaquil, Guayaquil, Ecuador. Universidad de Esmeraldas, Esmeraldas, Ecuador.** *Investigación médico-ecológico (sic) y socioeconómico (sic) en una tribu Cayapa de la provincia de Esmeraldas, realizada por las Universidades de Guayaquil y Esmeraldas en 1973. (Medicoecological and socioeconomic study of a Caypa tribe in Esmeraldas province, Ecuador, in 1973).* Revista Ecuatoriana de Higiene y Medicina Tropical (Guayaquil, Ecuador), 31(1), 1978, 63-71. Span.

A multidisciplinary expedition into the jungles of Ecuador, province of Esmeraldas, was undertaken in order to investigate the medical, ecological, and socioeconomic aspects of the Cayapa aboriginals. This paper describes the expedition and briefly summarizes the findings. Burkitt's lymphoma (1 case), pulmonary paragonimiasis and tuberculosis, leishmaniasis, malaria, malabsorption syndrome, intestinal parasitism, and various skin diseases were identified. (HC-L)

9779 **Upatham, E.S., Koura, M., Ahmed, M.D., Awad, A.H.** *Studies on the transmission of* Schistosoma haematobium *and the bionomics of* Bulinus (Ph.) abyssinicus *in the Somali Democratic Republic.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 75(1), 1981, 63-69. Engl.

Studies were carried out from April 1977-November 1978 on the transmission of *Schistosoma haematobium* and on the bionomics of its intermediate snail host, *Bulinus abyssinicus*, in Koryole and Merca districts, Somalia. The results are discussed and presented as statistical data. Snails and *S. haematobium* infections were found mainly in standing water. Snails were unable to establish themselves in irrigation canals because the water in the canals was fast-flowing, there were no plants to provide food and substrate, and the canals were allowed to dry out and dug out frequently, rendering them unsuitable as snail habitats. (Modified journal abstract)

9780 **van Balen, H., Mercenier, P.** *Influence of measles vaccination on survival pattern of 7 — 35-month-old children in Kasongo, Zaire.* Lancet (London), I(8223), 4 Apr 1981, 764-767. Engl. 15 refs.

In a zone (Kasongo, Zaire) with a high measles fatality rate, the risk of dying between the ages of 7-35 months for a vaccinated population was compared with that for an unvaccinated control group. Life-table analysis for both groups showed that measles vaccination reduced the risk of dying at the age of maximum exposure to measles. The gain in survival probability, however, tended to diminish afterwards to approach that of the unvaccinated group. Statistical data are included. (Modified journal abstract)

9781 **Van Sprundel, M., Dindinian, O., Mebeus, A.** *Poids à la naissance comme indicateur de santé; exemple du Rwanda. (Birth weight as an indicator of health in Rwanda).* Médecine d'Afrique Noire (Paris), 28(2), Feb 1981, 93-99. Fren. 21 refs.

Because birth weight is largely determined by the nutritional status of the pregnant woman, it is a good indicator of the nutritional status of the population as a whole. This paper presents and analyzes data on birth weight that was obtained at the Butare maternity unit, Rwanda, during 1974. Of 1 641 single live births, 19.9% infants were below 2 500 g in weight. Birth weight correlated directly with age and parity, very young mothers (aged 15-19 years) being particularly at risk. A seasonal variation in birth weight was observed, lending support to the hypothesis that birth weight is influenced by the varying availability of protein and calories during the agricultural cycle. Seven tables of data are included. (HC-L)

9782 **Van Steenbergen, W.M., Kusin, J.A., Van Rees, M.M.** *Lactation performance of Akamba mothers, Kenya; breast feeding behaviour, breast milk yield and composition.* Journal of Tropical Pediatrics (London), 27(3), Jun 1981, 155-161. Engl. Refs.

Studies of breast milk yield in 85 mothers as measured by the test weighing technique were carried out in the lean season and the post-harvest season of the staple food (maize) in a rural community in Kenya. Breast-feeding was practiced for 18-24 months. The average yield per 24 hours for the seasons combined was 778 ml at 0-1 month and 301 at 18-23 months. Breast milk composition was comparable to values from industrialized countries. The results indicate that the lactation capacity of the Akamba mothers was comparable to that of well-nourished, healthy mothers in the USA and Europe. Statistical data are included. (Modified journal abstract)

9783 **Villar, J., Belizán, J.M.** *Breastfeeding in developing countries.* Lancet (London), II(8247), 19 Sep 1981, 621-623. Engl. 33 refs.

The calculated protein and calorie requirements and nutritional status of intrauterine-growth-retarded infants of poor mothers in developing countries were compared with the estimated amounts of protein and calories

supplied in the mother's milk and their nutritional status before and during lactation. The results, discussed and presented as statistical data, reveal that the mothers were usually unable to provide the required proteins and calories. Socioeconomic factors determine nutritional status and it is the responsibility of governments to ensure the health and adequate nutrition of mothers and infants. (Modified journal abstract)

9784 **Vincent, A.L., Vargas de Gómez, M., Gonzalvo, A., Nayar, J., Sodeman, W.A.** *Filariasis in the Dominican Republic.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(3), May 1981, 739-741. Engl. 13 refs.

A review of local publications shows *Wuchereria bancrofti* to be endemic in a number of southern cities in the Dominican Republic. *Mansonella ozzardi* and *Onchocerca volvulus* have also been identified and are considered to be present within the country. Filariasis is particularly prevalent among the darker-skinned Dominicans, especially among those resident along the western border with Haiti. (Modified journal abstract)

9785 **Waterlow, J.C., Ashworth, A., Griffiths, M.** *Faltering in infant growth in less-developed countries.* Lancet (London), II(8205), 29 Nov 1980, 1176-1178. Engl. 33 refs.

With reference to 17 longitudinal studies, this paper compares data from the UK and various developing countries on monthly infant weight increments over the 1st 6 months of life. The overall pattern that emerges is one of faltering growth between the ages of 3-4 months in the developing countries as compared to the UK, suggesting the need for earlier supplementation with solids than hitherto recommended. (HC-L)

9786 **Weller, P.F., Ottesen, E.A., Heck, L., Tere, T., Neva, F.A.** *Endemic filariasis on a Pacific island; I: clinical, epidemiologic, and parasitologic aspects.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 31(5), Sep 1982, 942-952. Engl. 27 refs.

Aspects of filariasis were investigated in 459 inhabitants of Mauke, Cook Islands, an area endemic for subperiodic *Wuchereria bancrofti* filariasis. Statistical data are presented on filarial history, laboratory findings, and interrelationships of filarial manifestations. Overall, 70% of adults had some clinical or laboratory evidence of filariasis and it is likely that virtually all of the islanders were infected. The investigators found little correlation between various symptomatic manifestations of filariasis and microfilaraemia. (Modified journal abstract)

9787 **Wenlock, R.J., Wenlock, R.W.** *Maternal nutrition, prolonged lactation and birth spacing in Ethiopia.* Journal of Biosocial Science (London), 13(3), Jul 1981, 261-268. Engl. Refs.

A survey of 375 Ethiopian mothers revealed that they were of average height but below average weight due to very low food energy intakes. This, combined with prolonged lactation (even by African standards) of 25-30 months and prolonged amenorrhea resulted in exceptionally long birth intervals. Indeed, fewer children were born to the Ethiopian mothers at every age than to their Zambian counterparts. This paper presents the study findings and compares them to national data from Zambia. (HC-L)

9788 **Werner, J.K., Barreto, P.** *Leishmaniasis in Colombia, a review.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 30(4), Jul 1981, 751-761. Engl. 60 refs.

A review is made of 60 publications on leishmaniasis in Colombia reported between 1889 and the present. A serious source of difficulty in interpreting the literature is the frequent discussion of cases (1 536 of 1 865, or 82%) that were never confirmed by observation of the parasite or by positive immunological tests. The apparent distribution of the disease is considerably biased by the real distribution of physicians. Nevertheless, laboratory-confirmed cutaneous leishmaniasis has been reported from most humid, lowland regions, and apparently the disease is endemic in nearly all the administrative sections of the country. Leishmaniasis is a seldom diagnosed but major health problem, in terms of the number of persons affected and the difficulty in obtaining treatment, in several regions of Colombia. Statistical data are included. (Modified journal abstract)

9789 **Westphal, R., Phillips, G., Irwig, L.M.** *Infant care and feeding in an urban black population.* South African Medical Journal (Cape Town), 60(20), 14 Nov 1981, 778-781. Engl. 13 refs.

A survey of 134 infants born in April and May 1976 in Soweto, South Africa, was conducted to determine patterns of child care and breast-feeding for the purpose of planning health education activities. Data are presented on: the location and care of these infants; their mothers' age, residence, education, and employment status; the mothers' feeding knowledge and intentions regarding breast-feeding, artificial feeding, introduction of solid foods, and child spacing as well as their understanding of growth charts; child-minders; and infant growth. The findings are analyzed with the help of five tables. (DP-E)

9790 **WHO, Geneva.** *Diarrhoeal diseases control; diarrhoea morbidity and mortality survey/Lutte contre les maladies diarrhéiques; enquête sur la morbidité de la mortalité dues aux maladies diarrhéiques.* Weekly Epidemiological Record (Geneva), 58(6), 11 Feb 1983, 37. Engl., Fren.

A 2-day survey in 1982 of 3 031 children aged less than 5 years in Colombo, Sri Lanka, revealed that 119 (4%) had had an episode of diarrhea beginning within the preceding 14 days. Of 12 deaths in children of that age recorded in the preceding 12 months, 6 were associated with diarrhea. Oral rehydration salts (ORS) were given to 34% of the 119 children, other medications to 32%, and home remedies to 30%. With regard to the use of health services, 49% of respondents said that they took their children to a Western-type general practitioner, 26% to a hospital, 25% to a dispensary, and the rest to alternative sources of care (e.g. Ayurvedic practitioners), but of the 119 patients with diarrhea the respective

figures were 36%, 34%, 17%, and 13% (at home). In response to questions about ORS, 78% of respondents had no knowledge of ORS, 18% had used them, and 4% knew of but had not used ORS. (Modified journal abstract)

9791 **WHO, Geneva.** *Tuberculosis control: a world review/Lutte antituberculeuse: examen mondial.* Weekly Epidemiological Record (Geneva), 56(50), 18 Dec 1981, 393-396. Engl., Fren.

The world-wide magnitude and distribution of tuberculosis is discussed in terms of epidemiological indices and morbidity and mortality statistics. The epidemiological indices considered most relevant are the age-specific prevalences of patients excreting bacilli demonstrable by direct smear examination and those of tuberculosis infection as demonstrated by tuberculin testing. (RMB)

9792 **WHO, Geneva.** *Expanded Programme on Immunization: programme impact on disease incidence/Programme Elargi de Vaccination: effets du programme sur l'incidence des maladies.* Weekly Epidemiological Record (Geneva), 56(44), 6 Nov 1981, 347-351. Engl., Fren.

The review and analysis of data from Thailand on polio, whooping cough, tetanus, and diphtheria incidence and immunization coverage provide an indication of the impact of immunization efforts in the Bangkok metropolitan area. For all four diseases, trends in incidence are downward. For three diseases (polio, diphtheria, and tetanus), expected shifts in age specific incidence are discernable, although not necessarily attributable to the immunization programme. For diphtheria, tetanus, and whooping cough, an association between higher immunization levels and lower disease incidence in sub-groups of the population was demonstrated; for poliomyelitis, such an association was not expected. Statistical data are included. (Modified journal abstract)

9793 **WHO, Geneva.** *Expanded Programme on Immunization: poliomyelitis prevalence survey/ Programme Elargi de Vaccination: enquête sur la prévalence de la poliomyélite.* Weekly Epidemiological Record (Geneva), 56(38), 25 Sep 1981, 297-298. Engl., Fren.

The incidence of poliomyelitis in the Yemen is calculated using a lameness survey conducted from November 1980-January 1981. Children aged 5-13 years were surveyed both in school and in the community; 6 000 urban and 6 000 rural children were included. The incidence from school records, especially in the urban groups, underestimated the situation at 1.5: 1 000 in the urban school group and 5.7:1 000 in the community. The rate for the urban group was 20.1:100 000 and, for the rural group, 17.2:100 000, giving an overall rate of 18.6: 100 000. (Modified journal abstract)

9794 **WHO, Geneva.** *Summary of the ad hoc survey on infant and early childhood mortality in Sierra Leone/Résumé de l'enquête spéciale sur la mortalité infantile et la mortalité de la première enfance en Sierra Leone.* World Health Statistics Quarterly (Geneva), 34(4), 1981, 220-238. Engl., Fren.

Data on the demographic, biological, and environmental factors affecting the health status of mothers and children as well as child mortality were collected in a 1974-1975 survey of 15 053 persons living in 3 229 households in western Sierra Leone. The survey methodology is described and the findings are presented in statistical tables and discussed under the headings of: demographic and environmental characteristics; fertility levels, patterns, and differentials; morbidity; mortality; and child care. Analysis of these statistics yielded a crude birthrate of 42.2 and a death rate of 17.6:1 000 population, with an infant mortality of 150:1 000 live births. Improvements in local vaccination programmes are recommended. (RMB)

9795 **Wong, H.B.** *Rice water treatment in infantile gastroenteritis.* Lancet (London), II(8237), 11 Jul 1981, 102-103. Engl. 10 refs.

In this Singapore study, 63 children with acute diarrhea were treated with the WHO oral electrolyte salt solution and 67 with oral rice water. The more dehydrated children of both groups were also given intravenous glucose-saline solution. All children were regraded onto powdered cow's milk between days 2 and 5. The serum electrolytes of both groups were the same on admission. In those who received only oral therapy, by day 3 the serum potassium was significantly higher and the urea significantly lower in the rice water group. From days 1-4, the cases treated with oral rice water also had less severe diarrhea and a smaller number of stools. (DP-E)

9796 **Yadav, H.** *1978 cholera outbreak in Krian district.* Medical Journal of Malaysia (Singapore), 36(3), Sep 1981, 129-135. Engl. 10 refs.

During a cholera epidemic in Krian district (Malaysia) in 1978, there were 77 cases and 92 carriers. The three main ethnic groups (Malays, Chinese, and Indians) were involved, but the Malays constituted the majority of cases and carriers. The overall infection and case attack rates were higher among the younger population. The case:carrier ratio was also higher in that group, especially among Indians. Various reasons and probable causes of the epidemic are briefly discussed. Statistical data are included. (Modified journal abstract)

9797 **Young, T.K.** *Epidemiology of tuberculosis in remote native communities.* Canadian Family Physician (Toronto, Ont.), (28), Jan 1982, 67-74. Engl. 20 refs.

The incidence and death rates of tuberculosis among Indians living in the Sioux Lookout Zone in Ontario (Canada) have declined over the past two decades. This 70-case series within the period 1975-1979 documents age:sex distribution, community distribution, sites of disease, signs and symptoms, bacteriologic status, X-ray findings, drug resistance and relapse rates, and the effects of vaccination and chemoprophylaxis. Such information can also be used to evaluate the health care delivery system in general and the tuberculosis control programme in particular. Policy implications in case-

finding, treatment, and prevention are discussed. Statistical data are included. (Modified journal abstract)

9798 **Yunes, J.** *Evolution of infant mortality and proportional infant mortality in Brazil/Evolution de la mortalité infantile et de la mortalité infantile proportionnelle au Brésil.* World Health Statistics Quarterly (Geneva), 34(4), 1981, 200-219 Engl., Fren. 10 refs.

A study of vital statistics data from Brazilian state capitals for the years 1968-1977 showed that infant mortality rates fluctuated from 85.2-103.5:1 000 live births, but no clear trend was apparent. Most causes of death were preventable by environmental health measures, vaccination, or early detection and treatment. Infant mortality rates in Brazil may be inaccurate because of underregistration, particularly of births, and a more reliable index is the proportional mortality rate. This index, in which the number of deaths of children aged less than 1 year is expressed as a proportion of total deaths, was 25.0% in 1968 and rose steadily to 31.4% in 1975 before falling to 28.3% in 1977. These changes are taken to indicate a fall in the level of health over this period, and it is suggested that this is the result of increasing poverty, urbanization, changing priorities by the Ministry of Health, inadequacies in the vaccination programme, and failure to implement improvements in nutrition. (Modified journal abstract)

9799 **Zablan, A.E.** *Maternal and child health practices.* Studies in Family Planning (New York), 10(6/7), Jun-Jul 1979, 192-194. Engl.

See also entry 9217.

As part of a maternal and child health/family planning (MCH/FP) project in Bohol province, the Philippines, three studies were carried out: a survey of maternal and child health practices with respect to the last live birth (1 157 women interviewed); a participant observation study of health practices; and a study of health care decision-making among 20 couples, each from four distinct ecological areas. This paper summarizes the study findings and their implications for the MCH/FP project. (HC-L)

9800 **Zhao, Y.** *Traditional Chinese medicine in pneumonia of children.* Chinese Medical Journal (Beijing), 94(9), Nov 1981, 601-606. Engl.

From December 1977-February 1979, 60 children with pneumonia were treated at the Beijing Traditional Chinese Medicine College using only traditional Chinese and no Western methods. According to traditional standards, the patients were classified into three groups, each of which received a different treatment. Of the 60 cases, 18 (30%) recovered in 3-5 days, 33 (55%) in 5-10 days, and 9 (15%) in 11-15 days, averaging 7.4 days. Case histories and statistical data are included. (DP-E)

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